

From knjhanlon at msn.com Tue Sep 1 19:55:03 2015
From: knjhanlon at msn.com (JAMES HANLON)
Date: Tue, 1 Sep 2015 17:55:03 -0600
Subject: [BoatAnchors] Sylvania 1625s
Message-ID: <BLU184-W21D355428B0F76CBF91AC5A06A0@phx.gbl>

Y'all,

I was scrounging around in my attic and I finally found a box of Sylvania 1625s that I stashed up there maybe ten years ago. There are 26 tubes in the box, all WW2 surplus, 1944 US Navy vintage, New Old Stock. I tested them on my Hickok 533 and they are all good. I have 5 closely matched (mutual conductance-wise) pairs, one matched trio, two matched quads, and 5 singles. If anyone is interested I'll entertain offers. They would be good tubes for your Command Set transmitters and modulators and for the DX-100 modulators.

Also, as I recall, the P&H LA-400 linear amplifier used a quad of modified 1625s. Some manufacturers, not RCA, brought the lead for the beam-forming plates out through the glass base of the tube and connected it to the cathode lead inside of the tube base. You could remove the base or just cut a slot in it at the right point and separate the beam-forming plates from the cathode electrically, then ground the control grid, screen grid, and beam-forming plates and drive the cathode to make a grounded grid amplifier. Does anyone know if the Sylvania tube was one that could be modified in that fashion?

Jim Hanlon, W8KGI

From w4sse at cox.net Tue Sep 1 21:33:57 2015
From: w4sse at cox.net (David - W4SSE)
Date: Tue, 01 Sep 2015 21:33:57 -0400
Subject: [BoatAnchors] Lakeshore Industries "Signal-Splitter"
Message-ID: <55E65205.9030102@cox.net>

In a weak moment I acquired the subject device which appears to be a single sideband adapter similar to the Central Electronics Sideband Slicer. Has four tubes and gets its power from either the host receiver or an external supply. I checked BAMA and Google but no luck finding a manual. Anyone out there by chance have a manual for this jewel? I'll pay copying costs and postage if you could make me a copy. Or, a PDF would be great.

Thanks,
Dave - W4SSE

From 1oldlens1 at ix.netcom.com Tue Sep 1 23:44:16 2015
From: 1oldlens1 at ix.netcom.com (Richard Knoppow)

Date: Tue, 1 Sep 2015 20:44:16 -0700

Subject: [BoatAnchors] Dumont 403A Scope

In-Reply-To: <55E4AED1.7030400@ix.netcom.com>

References: <55E34AA8.7050208@ix.netcom.com> <55E4AED1.7030400@ix.netcom.com>

Message-ID: <55E67090.6020300@ix.netcom.com>

FWIW, the problem with the trace being off screen was due to a resistor that had opened up! A one watt composition resistor. Shows no sign of burning. Its a 560K and, in circuit, measured more than 2 megohms. I still have problems with this scope but am making progress. I suspect there are a lot of other seriously off value resistors. There are also some caps in the thing but both amplifiers are direct coupled so they are not, for the most part, in the signal path.

On 8/31/2015 12:45 PM, Richard Knoppow via BoatAnchors wrote:

> Further on. Evidently there were at least two versions of the 304-A.
> One is shown in the handbook at BAMA and is what I have. The handbook
> does not have a schematic. The schematic which is in the BAMA file is
> almost but not quite the same. My scope has a couple of 6AL5 diodes
> in it and a ballast tube current regulator. One of the dual diodes
> seems to be the clipper for the calibrator and the other a clipper or
> limiter for the synch level. The earlier (?) version in the schematic
> does not have the calibrator but has a line frequency calibrator jack
> on the front panel, a signal dropped off the filament line. I would
> like to find a correct schematic but have had not luck finding one
> with a web search. I wonder if anyone has it or knows where to find it.

> My scope, after working pretty well for a while, has developed a
> problem which I am now trying to track down. The spot is pulled way
> off the screen, to the right I think. I have not yet performed the
> resistance and voltage checks. I checked all the tubes yesterday and
> found a couple of 12AU7A s that are not balanced but I don't think
> this is the problem because it started suddenly. I will continue to
> work on this thing and will post back if I either find the problem or
> need help.

> Somewhere in the blogs I went through when searching I found
> someone asking about the power transformer. The one in mine is quite
> large and appears to be potted. In fact, its overall a very ruggedly
> built instrument.

>

> On 8/30/2015 11:25 AM, Richard Knoppow via BoatAnchors wrote:

>> I came home with a Dumont 403-A oscillograph (that's what Dumont
>> called them) from the TRW swap meet yesterday. I paid a token price
>> for it, \$10. After some tweeking and checking I found it works. It
>> does not appear to have had any attention since it was built. There
>> are some definite signs that the capacitors need to be replaced, as
>> would be expected in something over sixty years old. The main symptom
>> is that the horizontal amplifier is non-linear which, of course,
>> makes the sweep non-linear too. This scope was evidently built about

>> the mid 1950s, a good ten years after Tektronix began building rather
>> more sophisticated scopes, but it has a triggered sweep. It is very
>> heavy compared to my non-working Heathkit 0-12. BTW, I need a power
>> transformer for the 0-12. If anyone has one please contact me. Mine
>> worked when I first took it out of storage but after a while the
>> transformer developed a short in the medium high voltage winding.
>> Not from bad filter caps, something else happened to it. Long
>> storage is not good for this stuff.
>> I would be nice to hear from anyone else who has either of these
>> scopes, especially the Dumont.
>>
>

--

Richard Knoppow
1oldlens1 at ix.netcom.com
WB6KBL

From ddillman at igc.org Sat Sep 5 15:29:38 2015
From: ddillman at igc.org (Richard Dillman)
Date: Sat, 5 Sep 2015 12:29:38 -0700 (GMT-07:00)
Subject: [BoatAnchors] K6KPH Bulletin Service
Message-ID: <8230092.1441481378971.JavaMail.root@elwamui-
hound.atl.sa.earthlink.net>

Short notice: K6KPH will begin testing bulletin service today at 1300PDT/2000Z on
3550 / 7050 / 18097.5. Please send comments and reports to k6kph at
radiomarine.org or phone the station at +1 415-669-9646

RD

=====
Richard Dillman, T2-GB-061170
Chief Operator, Coast Station KSM
Maritime Radio Historical Society
<http://www.radiomarine.org>
=====

From 1oldlens1 at ix.netcom.com Sat Sep 5 16:45:49 2015
From: 1oldlens1 at ix.netcom.com (Richard Knoppow)
Date: Sat, 5 Sep 2015 13:45:49 -0700
Subject: [BoatAnchors] K6KPH Bulletin Service
In-Reply-To: <8230092.1441481378971.JavaMail.root@elwamui-
hound.atl.sa.earthlink.net>

References: <8230092.1441481378971.JavaMail.root@elwamui-hound.atl.sa.earthlink.net>

Message-ID: <55EB547D.7090508@ix.netcom.com>

Heard them very loud on 7050 but not at all on the other frequencies. Didn't get my rig fired up in time to call. I hope they will be on again later.

On 9/5/2015 12:29 PM, Richard Dillman via BoatAnchors wrote:

> Short notice: K6KPH will begin testing bulletin service today at 1300PDT/2000Z on 3550 / 7050 / 18097.5. Please send comments and reports to k6kph at radiomarine.org or phone the station at +1 415-669-9646

>

> RD

>

> =====

> Richard Dillman, T2-GB-061170

> Chief Operator, Coast Station KSM

> Maritime Radio Historical Society

> <http://www.radiomarine.org>

> =====

>

> -----

> BoatAnchors mailing list

> BoatAnchors at theporch.com

> <https://minime.theporch.com/mailman/listinfo/boatanchors>

>

--

Richard Knoppow

1oldlens1 at ix.netcom.com

WB6KBL

From gsantacana at gmail.com Sat Sep 5 22:34:44 2015

From: gsantacana at gmail.com (Guido Santacana)

Date: Sat, 5 Sep 2015 22:34:44 -0400

Subject: [BoatAnchors] SP600JX

Message-ID: <E7E1B7C4-2900-4EC7-965A-A2D24BAFAFC8@gmail.com>

Gentlemen,

On this very hot and humid evening with a vintage Fasco fan in front of me, I am looking at the underside of my old SP600JX. It was about time for some maintenance on this one and the shelf where it sits needed cleaning. I dusted the upper chassis first, then opened the underside and for the first time in many years saw work that I had done maybe 25 to 30 years ago. Also found out that I do much better work now. A lot of orange drop replacements and many replaced resistors.

Orange drops where the "in thing" at that time when replacing paper caps. Now, this radio is working well except for some problems related to the selectivity switch easily resolved with contact cleaner. I decided to check some of the remaining older caps and resistors and this is what I found:

4 10mf can electrolytics are open. Three of them are installed in the back of the chassis and connected together. They read open in the ESR meter.

The original power supply filter is in excellent shape.

All resistors read ok.

Now, there is a capacitor (c-102), a .01uF Sangamo one that looks like a mica but is probably paper. The manual does not describe it either way. Anyone knows if this is a paper cap? Any other thing I should check?

This SP600JX has been with me since 1980 when I traded a complete and original with cabinet RCA AR88 for it. Yes, I did it but at the time it seemed reasonable and I wanted that SP600. The sad part is that the AR88 was probably trashed after its owner passed away years after the trade. Anyway is time to give this old friend some TLC. I could lift this thing off the floor so easily back then..wonder what happened....

73s

Guido Santacana KP4FAR

Sent from my iPad

From gumbear at pacbell.net Sat Sep 5 23:26:28 2015
From: gumbear at pacbell.net (Arden Allen)
Date: Sat, 5 Sep 2015 20:26:28 -0700
Subject: [BoatAnchors] SP600JX
In-Reply-To: <E7E1B7C4-2900-4EC7-965A-A2D24BAFAFC8@gmail.com>
References: <E7E1B7C4-2900-4EC7-965A-A2D24BAFAFC8@gmail.com>
Message-ID: <59ADB494B50D4D86AD9E2C52BCB135D7@KB6NAX>

> Now, there is a capacitor (c-102), a .01uF Sangamo one that
> looks like a mica but is probably paper. The manual does not describe it
> either way. Anyone knows if this is a paper cap? Any other thing I should
> check?

If the .01 cap is a mica it would be considerably larger, about 1 x 1 1/4 inch square and 1/4 inch thick. Check leakage resistance and if less than about 500 megohms and in a circuit that the leakage could be upsetting a tube bias or a B+ bypass remember leakage increases with temperature so when things get hot leakage resistance could be considerably lower. I'm betting

it's a leaky paper cap.

I'm about to buy a miniature fork lift to move my radios.

Arden Allen
KB6NAX

He who is cruel to animals becomes
hard also in his dealings with men.
We can judge the heart of a man by
his treatment of animals.
?Immanuel Kant

From gsantacana at gmail.com Sun Sep 6 09:52:46 2015
From: gsantacana at gmail.com (Guido Santacana)
Date: Sun, 6 Sep 2015 09:52:46 -0400
Subject: [BoatAnchors] SP600JX
In-Reply-To: <59ADB494B50D4D86AD9E2C52BCB135D7@KB6NAX>
References: <E7E1B7C4-2900-4EC7-965A-A2D24BAFAFC8@gmail.com>
<59ADB494B50D4D86AD9E2C52BCB135D7@KB6NAX>
Message-ID: <4E853843-60A5-4614-BB30-13C4DE28253C@gmail.com>

Unfortunately I have two manuals and neither gives the cap type. It looks a lot like one I took years ago from the RF section of the RBC. That one had shorted and taken out the B+ from the section. I will test this one it with the T0-4 and see what comes out. It is indeed a square cap with the measurements for a .01 mica but also paper.

TNX & 73s

Guido Santacana KP4FAR

Sent from my iPad

On Sep 5, 2015, at 11:26 PM, "Arden Allen" <gumbear at pacbell.net> wrote:

>> Now, there is a capacitor (c-102), a .01uF Sangamo one that looks like a mica but is probably paper. The manual does not describe it either way. Anyone knows if this is a paper cap? Any other thing I should check?

>

> If the .01 cap is a mica it would be considerably larger, about 1 x 1 1/4 inch square and 1/4 inch thick. Check leakage resistance and if less than about 500 megohms and in a circuit that the leakage could be upsetting a tube bias or a B+ bypass remember leakage increases with temperature so when things get hot leakage resistance could be considerably lower. I'm betting it's a leaky paper cap.

>

> I'm about to buy a miniature fork lift to move my radios.
>
> Arden Allen
> KB6NAX
>
> He who is cruel to animals becomes
> hard also in his dealings with men.
> We can judge the heart of a man by
> his treatment of animals.
> ?Immanuel Kant

From 1oldlens1 at ix.netcom.com Sun Sep 6 12:42:47 2015
From: 1oldlens1 at ix.netcom.com (Richard Knoppow)
Date: Sun, 6 Sep 2015 09:42:47 -0700
Subject: [BoatAnchors] SP600JX
In-Reply-To: <E7E1B7C4-2900-4EC7-965A-A2D24BAFAFC8@gmail.com>
References: <E7E1B7C4-2900-4EC7-965A-A2D24BAFAFC8@gmail.com>
Message-ID: <55EC6D07.1070505@ix.netcom.com>

Do you know which version of the SP-600 you have? If you have the original tuning capacitor cover the label should say.

I am asking because the military manual lists C-102 as a 22,000 uuF, 400V paper cap with an Aerovox part number. Hammarlund, in common with most manufacturers changes vendors of components at times.

The dot code on the capacitor may tell you what kind it is, paper caps had white or silver dots and mica caps had black dots. Mica caps should probably be replaced with mica but paper caps should be replaced with plastic film caps. I am not sure what kind of caps the orange drops were. This was a trade name used for many years but not all orange colored dipped caps are Orange Drops.

The standard mod for the SP-600 was to replace all paper caps with disc ceramic caps. After the infamous Black Beauty caps began to fail Hammarlund switched to ceramics for new production and there was a military Modification Work Order requiring that all paper caps in existing receivers be replaced. This is some forty caps. There is a list on the web somewhere or I can send it to you.

Also, check the electrolytic caps in the cans. They are old enough to have some failures although they seem to be pretty long lived. They can cause problems with the AVC and other functions when they begin to get leaky.

FWIW, Sprague Black Beauty caps were sold as deluxe long lived caps. They were oil filled through a tube at one end that was sealed with a lead and solder. Evidently something went wrong in production because a great many of them failed within a couple of years. One problem was that if too much heat was used in soldering the seal would be broken and the oil would leak out. But something else seems to have happened because a great many BBs are found with cracked or broken cases

and the ones I've dissected had distorted windings Sprague advertised that the windings were very uniform so I don't think this was done deliberately.

Too bad about the AR-88, they are very good receivers. I have one I restored and its performance is quite astonishing. However, a good SP-600 is probably equal and has a much better crystal filter in it.

On 9/5/2015 7:34 PM, Guido Santacana via BoatAnchors wrote:

> Gentlemen,

>

> On this very hot and humid evening with a vintage Fasco fan in front of me, I am looking at the underside of my old SP600JX. It was about time for some maintenance on this one and the shelf where it sits needed cleaning. I dusted the upper chassis first, then opened the underside and for the first time in many years saw work that I had done maybe 25 to 30 years ago. Also found out that I do much better work now. A lot of orange drop replacements and many replaced resistors. Orange drops where the "in thing" at that time when replacing paper caps. Now, this radio is working well except for some problems related to the selectivity switch easily resolved with contact cleaner. I decided to check some of the remaining older caps and resistors and this is what I found:

>

> 4 10mf can electrolytics are open. Three of them are installed in the back of the chassis and connected together. They read open in the ESR meter.

>

> The original power supply filter is in excellent shape.

>

> All resistors read ok.

>

>

> Now, there is a capacitor (c-102), a .01uF Sangamo one that looks like a mica but is probably paper. The manual does not describe it either way. Anyone knows if this is a paper cap? Any other thing I should check?

>

> This SP600JX has been with me since 1980 when I traded a complete and original with cabinet RCA AR88 for it. Yes, I did it but at the time it seemed reasonable and I wanted that SP600. The sad part is that the AR88 was probably trashed after its owner passed away years after the trade. Anyway is time to give this old friend some TLC. I could lift this thing off the floor so easily back then..wonder what happened....

>

> 73s

>

> Guido Santacana KP4FAR

>

> Sent from my iPad

>

> -----
> BoatAnchors mailing list

> BoatAnchors at theporch.com

> <https://minime.theporch.com/mailman/listinfo/boatanchors>

>

--

Richard Knoppow
1oldlens1 at ix.netcom.com
WB6KBL

From n7rk at cox.net Sun Sep 6 13:51:05 2015
From: n7rk at cox.net (Dave Hollander)
Date: Sun, 06 Sep 2015 10:51:05 -0700
Subject: [BoatAnchors] Edebris - BAMA Down
Message-ID: <55EC7D09.4060700@cox.net>

Have not been able to get the BAMA mirror - edebris for the past two days.

Any idea what has happened to this wonderful resource?

Tnx and 73,

Dave N7RK

From navy.radio at gmail.com Sun Sep 6 16:41:22 2015
From: navy.radio at gmail.com (Nick England)
Date: Sun, 6 Sep 2015 16:41:22 -0400
Subject: [BoatAnchors] Shelby NC hamfest photos
Message-ID: <CAB55hNfShXBXZSH8h+T6NdBtb-UiEG40rWhc0J3sn8Hy5QT0pg@mail.gmail.com>

Photos now being uploaded to
http://www.virhistory.com/ham/shelby_2015.htm

Definitely a smaller fest than in years past. They didn't even have to use the tailgater overflow area outside the fence.
But still plenty of interesting gear and interesting friends to chat with.

Cheers,
Nick K4NYW

From rdavis7 at comcast.net Sun Sep 6 17:40:25 2015
From: rdavis7 at comcast.net (RDavis)
Date: Sun, 6 Sep 2015 17:40:25 -0400
Subject: [BoatAnchors] Shelby NC hamfest photos
In-Reply-To: <CAB55hNfShXBXZSH8h+T6NdBtb-UiEG40rWhc0J3sn8Hy5QT0pg@mail.gmail.com>
References: <CAB55hNfShXBXZSH8h+T6NdBtb-UiEG40rWhc0J3sn8Hy5QT0pg@mail.gmail.com>

Message-ID: <D4341148-E802-45C7-82B8-8944025B808B@comcast.net>

As usual, thanks Nick. Rick K8PJQ

Sent from my iPad

> On Sep 6, 2015, at 4:41 PM, Nick England via BoatAnchors <boatanchors at theporch.com> wrote:
>
> Photos now being uploaded to
> http://www.virhistory.com/ham/shelby_2015.htm
>
> Definitely a smaller fest than in years past. They didn't even have to use
> the tailgater overflow area outside the fence.
> But still plenty of interesting gear and interesting friends to chat with.
>
> Cheers,
> Nick K4NYW
>
> -----
> BoatAnchors mailing list
> BoatAnchors at theporch.com
> <https://minime.theporch.com/mailman/listinfo/boatanchors>

From k7sz at live.com Sun Sep 6 19:22:01 2015
From: k7sz at live.com (Rich Arland)
Date: Sun, 6 Sep 2015 19:22:01 -0400
Subject: [BoatAnchors] NC-300 w/calibrator
Message-ID: <BLU172-W32B9098C847722601CD4D2F6550@phx.gbl>

I had planned on making Shelby this year. A first for me. Unfortunately family obligations came first so now I am going to put this out there to the group before listing it on e-bay.

I have for sale a National NC-300 w/Xtal calibrator. It works although it needs an alignment. I used a sig-gen and all bands indicated between .5mV-1mV MDS. All knobs are original.

It's HEAVY! I would really like to sell this to someone in/around Metro Atlanta. I would deliver or meet 1/2 way.

Asking \$250 + S/H (if I have to ship it out of the Atlanta area).

Interested? Please respond off-list. (K7SZ at live dot com).

Vy 73

Rich K7SZ

From gsantacana at gmail.com Mon Sep 7 01:02:49 2015
From: gsantacana at gmail.com (Guido Santacana)
Date: Mon, 7 Sep 2015 01:02:49 -0400
Subject: [BoatAnchors] SP600JX
In-Reply-To: <55ED0AE0.9050200@ix.netcom.com>
References: <E7E1B7C4-2900-4EC7-965A-A2D24BAFAFC8@gmail.com>
<55EC6D07.1070505@ix.netcom.com>
<45AA90E5-269A-478C-A0AC-BF26E38C68F7@gmail.com>
<55ED0AE0.9050200@ix.netcom.com>
Message-ID: <CA01yix3jjiltFzqFotsshqgJQNVD_K6z9XugNU+p-g++i8DZUQ@mail.gmail.com>

After the partial recap I had to realign the 455kHz IF. It was way out of adjustment. The 3.995kHz was ok. Only a couple of bands had drifted out of frequency but not by a lot so the RF section adjustments were few. Tomorrow I will do some more tweaking and after that it goes back to the shelf. Next time probably my grandchildren will take it out of the shelf and....who knows.

My old AR 88 was already recapped when I got it back in the early 80s. The only problem was an open primary in the audio transformer. A replacement solved the problem. This unit had no signal level meter. If had the original cabinet. The second one was a rack mount unit with a National meter. I always liked their performance and audio and wish that I had kept at least one.

73s

Guido KP4FAR

On Sunday, September 6, 2015, Richard Knoppow <1oldlens1 at ix.netcom.com> wrote:

> The original SP-600 had many 0.02uF paper caps, that's what the BBs are. The rebuild used 0.01uF ceramics. I don't know why the value was reduced by half but suspect the ceramic caps were as effective and reducing the capacitance increased the resonant frequency of the caps. The mica cap may be a later replacement.

> My AR-88 was a war time unit with a number of Micamold and Solar flat paper caps in it. All were bad and were replaced with plastic film caps. The caps in the original design were mica caps made by RCA. These were of an odd lozenge shape and the couple in my AR-88 are an odd purplish-pink color although I've seen photos of others that were brown. RCA had a patent on a method of making stacked mica caps so I suspect that is what they used. The mica caps in the local oscillator compartment are postage stamp silver mica types along with dog-bone ceramic temperature

compensating caps. All were good.

> I have had to replace a few can type electrolytics in my two SP-600s. Leaky and poor AVC was the main symptom. The AR-88 has a number of can caps but they are oil-filled paper caps. In mine all had leaked out their oil due to the terminal seals disintegrating. After one attempt at restuffing one I gave up and just mounted the new caps on terminal strips screwed in place of the cans. At some point I will replace all the electrolytics in my SP-600s the same way. I don't care so much about the appearance of the under chassis as I do about performance.

> I have said before that I think many of the complaints about the SP-600 is because there are many walking wounded among them.

>

>

>

> On 9/6/2015 6:55 PM, Guido Santacana wrote:

>

> The version of this SP600 is the JX-1 with serial # 3866. One of my manuals indicates a value of .02uF, the other has a value of .01uF for this cap. Neither mentions the type of cap. In any case and in accordance with the Sangamo code, this is a mica cap. In fact today I found two just like it in my mica cap drawers. The T0-4 insulation resistance test says it's ok so the cap goes back in.

>

> What I did find was 4 completely bad 10uF electrolytics. These are can types. I replaced them with smaller counter parts that were placed in a way that the old cans remained in place albeit disconnected. Two remaining molded caps and a Vit cap, all .01uF were also replaced. All contacts and pots cleaned. The orange drop caps are doing ok so I left them in place except one that had a cold solder. When I tried to resolder the lead just came out of the cap.

>

> The AVC function that was intermittent is now working well and a noise I heard in the lower bands is gone. Now for some realignment and more cleaning, boy this thing was dusty.

>

> About those antigravity lytics, a guy from the Enterprise was selling them used on ebay. Is what they use in their gravity control circuits so that they can remain in 1g no matter what crazy thing the starship is doing. Sorry but he wants more for one than what an SX88 is worth. I rather go for the 88. Now about that mini forklift.....

>

> Best 73s

>

> Guido Santacana KP4FAR

>

> Sent from my iPad

>

> On Sep 6, 2015, at 12:42 PM, Richard Knoppow via BoatAnchors <

boatanchors at theporch.com> wrote:

>

> Do you know which version of the SP-600 you have? If you have the original tuning capacitor cover the label should say.

> I am asking because the military manual lists C-102 as a 22,000 uuF, 400V paper cap with an Aerovox part number. Hammarlund, in common with most manufacturers changes vendors of components at times.

> The dot code on the capacitor may tell you what kind it is, paper caps had white or silver dots and mica caps had black dots. Mica caps should probably be replaced with mica but paper caps should be replaced with plastic film caps. I am not sure what kind of caps the orange drops were. This was a trade name used for many years but not all orange colored dipped caps are Orange Drops.

> The standard mod for the SP-600 was to replace all paper caps with disc ceramic caps. After the infamous Black Beauty caps began to fail Hammarlund switched to ceramics for new production and there was a military Modification Work Order requiring that all paper caps in existing receivers be replaced. This is some forty caps. There is a list on the web somewhere or I can send it to you.

> Also, check the electrolytic caps in the cans. They are old enough to have some failures although they seem to be pretty long lived. They can cause problems with the AVC and other functions when they begin to get leaky.

> FWIW, Sprague Black Beauty caps were sold as deluxe long lived caps. They were oil filled through a tube at one end that was sealed with a lead and solder. Evidently something went wrong in production because a great many of them failed within a couple of years. One problem was that if too much heat was used in soldering the seal would be broken and the oil would leak out. But something else seems to have happened because a great many BBs are found with cracked or broken cases and the ones I've dissected had distorted windings Sprague advertised that the windings were very uniform so I don't think this was done deliberately.

> Too bad about the AR-88, they are very good receivers. I have one I restored and its performance is quite astonishing. However, a good SP-600 is probably equal and has a much better crystal filter in it.

> On 9/5/2015 7:34 PM, Guido Santacana via BoatAnchors wrote:

>

> Gentlemen,

>

> On this very hot and humid evening with a vintage Fasco fan in front of me, I am looking at the underside of my old SP600JX. It was about time for some maintenance on this one and the shelf where it sits needed cleaning. I dusted the upper chassis first, then opened the underside and for the first time in many years saw work that I had done maybe 25 to 30 years ago. Also found out that I do much better work now. A lot of orange drop replacements and many replaced resistors. Orange drops where the "in thing" at that time when replacing paper caps. Now, this radio is working well except for some problems related to the selectivity switch easily resolved with contact cleaner. I decided to check some of the remaining older caps and resistors

and this is what I found:

>
> 4 10mf can electrolytics are open. Three of them are installed in the
back of the chassis and connected together. They read open in the ESR meter.
>
> The original power supply filter is in excellent shape.
>
> All resistors read ok.
>
>
> Now, there is a capacitor (c-102), a .01uF Sangamo one that looks like a
mica but is probably paper. The manual does not describe it either way.
Anyone knows if this is a paper cap? Any other thing I should check?
>
> This SP600JX has been with me since 1980 when I traded a complete and
original with cabinet RCA AR88 for it. Yes, I did it but at the time it
seemed reasonable and I wanted that SP600. The sad part is that the AR88
was probably trashed after its owner passed away years after the trade.
Anyway is time to give this old friend some TLC. I could lift this thing
off the floor so easily back then..wonder what happened....
>
> 73s
>
> Guido Santacana KP4FAR
>
> Sent from my iPad
> -----
> BoatAnchors mailing list
> BoatAnchors at theporch.com
> <https://minime.theporch.com/mailman/listinfo/boatanchors>
>
> --
> Richard Knoppow
> 1oldlens1 at ix.netcom.com
> WB6KBL
>
> -----
> BoatAnchors mailing list
> BoatAnchors at theporch.com
> <https://minime.theporch.com/mailman/listinfo/boatanchors>
>
> --
> Richard Knoppow
> 1oldlens1 at ix.netcom.com
> WB6KBL

From 1oldlens1 at ix.netcom.com Mon Sep 7 01:14:21 2015

From: 1oldlens1 at ix.netcom.com (Richard Knoppow)
Date: Sun, 6 Sep 2015 22:14:21 -0700
Subject: [BoatAnchors] SP600JX
In-Reply-To: <CA01yix3jjiltFzqFotsshqgJQNVD_K6z9XugNU+p-g++i8DZUQ@mail.gmail.com>
References: <E7E1B7C4-2900-4EC7-965A-A2D24BAFAFC8@gmail.com>
<55EC6D07.1070505@ix.netcom.com>
<45AA90E5-269A-478C-A0AC-BF26E38C68F7@gmail.com>
<55ED0AE0.9050200@ix.netcom.com>
<CA01yix3jjiltFzqFotsshqgJQNVD_K6z9XugNU+p-g++i8DZUQ@mail.gmail.com>
Message-ID: <55ED1D2D.6010203@ix.netcom.com>

Most of the AR-88s did not have meters. RCA said they could not be obtained during the war and were not necessary. A few early sets had them and the last of the AR-88 series had them. Mine did not have a meter but I was able to find one. They are easy to install. I just like to see it wiggle. The AR-88 has some feedback around the audio amp so the distortion is lower than usual for a single ended amplifier. I am partially deaf so can't judge audio quality well. RCA did not use a push-pull amplifier in order to reduce heat from both amplifier and power supply. Mine is an F version, a modification meant to be part of the DR-89 diversity system. This had three modified AR-88s, a tone generator and combiner and a monitor. There were meters on the output of the diode detectors. The modifications were minor and I un-modified the AVC changes in mine because it has better overload characteristics without them. Could be modified back if anyone wanted. These came in a large rack and I don't have a case. Maybe someday I will find one. However, it has a bottom cover which I understand the ones in desk cabinets did not have.

Its a shame to put the SP-600 on the shelf, it should be out somewhere where it will be used occasionally.

On 9/6/2015 10:02 PM, Guido Santacana wrote:

> After the partial recap I had to realign the 455kHz IF. It was way out
> of adjustment. The 3.995kHz was ok. Only a couple of bands had drifted
> out of frequency but not by a lot so the RF section adjustments were
> few. Tomorrow I will do some more tweaking and after that it goes back
> to the shelf. Next time probably my grandchildren will take it out of
> the shelf and....who knows.

>

> My old AR 88 was already recapped when I got it back in the early 80s.
> The only problem was an open primary in the audio transformer. A
> replacement solved the problem. This unit had no signal level meter.
> If had the original cabinet. The second one was a rack mount unit with
> a National meter. I always liked their performance and audio and
> wish that I had kept at least one.

>

>

>

> 73s
>
> Guido KP4FAR
>
> On Sunday, September 6, 2015, Richard Knoppow <1oldlens1 at ix.netcom.com
> <mailto:1oldlens1 at ix.netcom.com>> wrote:
> > The original SP-600 had many 0.02uF paper caps, that's what the
> BBs are. The rebuild used 0.01uF ceramics. I don't know why the value
> was reduced by half but suspect the ceramic caps were as effective and
> reducing the capacitance increased the resonant frequency of the caps.
> The mica cap may be a later replacement.
> > My AR-88 was a war time unit with a number of Micamold and Solar
> flat paper caps in it. All were bad and were replaced with plastic
> film caps. The caps in the original design were mica caps made by
> RCA. These were of an odd lozenge shape and the couple in my AR-88
> are an odd purplish-pink color although I've seen photos of others
> that were brown. RCA had a patent on a method of making stacked mica
> caps so I suspect that is what they used. The mica caps in the local
> oscillator compartment are postage stamp silver mica types along with
> dog-bone ceramic temperature compensating caps. All were good.
> > I have had to replace a few can type electrolytics in my two
> SP-600s. Leaky and poor AVC was the main symptom. The AR-88 has a
> number of can caps but they are oil-filled paper caps. In mine all had
> leaked out their oil due to the terminal seals disintegrating. After
> one attempt at restuffing one I gave up and just mounted the new caps
> on terminal strips screwed in place of the cans. At some point I will
> replace all the electrolytics in my SP-600s the same way. I don't
> care so much about the appearance of the under chassis as I do about
> performance.
> > I have said before that I think many of the complaints about the
> SP-600 is because there are many walking wounded among them.
> >
> >
> >
> > On 9/6/2015 6:55 PM, Guido Santacana wrote:
> >
> > The version of this SP600 is the JX-1 with serial # 3866. One of my
> manuals indicates a value of .02uF, the other has a value of .01uF for
> this cap. Neither mentions the type of cap. In any case and in
> accordance with the Sangamo code, this is a mica cap. In fact today I
> found two just like it in my mica cap drawers. The T0-4 insulation
> resistance test says it's ok so the cap goes back in.
> >
> > What I did find was 4 completely bad 10uF electrolytics. These are
> can types. I replaced them with smaller counter parts that were placed
> in a way that the old cans remained in place albeit disconnected. Two
> remaining molded caps and a Vit cap, all .01uF were also replaced. All
> contacts and pots cleaned. The orange drop caps are doing ok so I left

> them in place except one that had a cold solder. When I tried to
> resolder the lead just came out of the cap.
> >
> > The AVC function that was intermittent is now working well and a
> noise I heard in the lower bands is gone. Now for some realignment and
> more cleaning, boy this thing was dusty.
> >
> > About those antigravity lytics, a guy from the Enterprise was
> selling them used on ebay. Is what they use in their gravity control
> circuits so that they can remain in 1g no matter what crazy thing the
> starship is doing. Sorry but he wants more for one than what an SX88
> is worth. I rather go for the 88. Now about that mini forklift.....
> >
> > Best 73s
> >
> > Guido Santacana KP4FAR
> >
> > Sent from my iPad
> >
> > On Sep 6, 2015, at 12:42 PM, Richard Knoppow via BoatAnchors
> <boatanchors at theporch.com <mailto:boatanchors at theporch.com>> wrote:
> >
> > Do you know which version of the SP-600 you have? If you have the
> original tuning capacitor cover the label should say.
> > I am asking because the military manual lists C-102 as a 22,000 uuF,
> 400V paper cap with an Aerovox part number. Hammarlund, in common with
> most manufacturers changes vendors of components at times.
> > The dot code on the capacitor may tell you what kind it is, paper
> caps had white or silver dots and mica caps had black dots. Mica caps
> should probably be replaced with mica but paper caps should be
> replaced with plastic film caps. I am not sure what kind of caps the
> orange drops were. This was a trade name used for many years but not
> all orange colored dipped caps are Orange Drops.
> > The standard mod for the SP-600 was to replace all paper caps with
> disc ceramic caps. After the infamous Black Beauty caps began to fail
> Hammarlund switched to ceramics for new production and there was a
> military Modification Work Order requiring that all paper caps in
> existing receivers be replaced. This is some forty caps. There is a
> list on the web somewhere or I can send it to you.
> > Also, check the electrolytic caps in the cans. They are old enough to
> have some failures although they seem to be pretty long lived. They
> can cause problems with the AVC and other functions when they begin to
> get leaky.
> > FWIW, Sprague Black Beauty caps were sold as deluxe long lived caps.
> They were oil filled through a tube at one end that was sealed with a
> lead and solder. Evidently something went wrong in production because
> a great many of them failed within a couple of years. One problem was
> that if too much heat was used in soldering the seal would be broken

> and the oil would leak out. But something else seems to have happened
> because a great many BBs are found with cracked or broken cases and
> the ones I've dissected had distorted windings Sprague advertised that
> the windings were very uniform so I don't think this was done deliberately.
> > Too bad about the AR-88, they are very good receivers. I have one I
> restored and its performance is quite astonishing. However, a good
> SP-600 is probably equal and has a much better crystal filter in it.
> > On 9/5/2015 7:34 PM, Guido Santacana via BoatAnchors wrote:
> >
> > Gentlemen,
> >
> > On this very hot and humid evening with a vintage Fasco fan in front
> of me, I am looking at the underside of my old SP600JX. It was about
> time for some maintenance on this one and the shelf where it sits
> needed cleaning. I dusted the upper chassis first, then opened the
> underside and for the first time in many years saw work that I had
> done maybe 25 to 30 years ago. Also found out that I do much better
> work now. A lot of orange drop replacements and many replaced
> resistors. Orange drops where the "in thing" at that time when
> replacing paper caps. Now, this radio is working well except for some
> problems related to the selectivity switch easily resolved with
> contact cleaner. I decided to check some of the remaining older caps
> and resistors and this is what I found:
> >
> > 4 10mf can electrolytics are open. Three of them are installed in
> the back of the chassis and connected together. They read open in the
> ESR meter.
> >
> > The original power supply filter is in excellent shape.
> >
> > All resistors read ok.
> >
> >
> > Now, there is a capacitor (c-102), a .01uF Sangamo one that looks
> like a mica but is probably paper. The manual does not describe it
> either way. Anyone knows if this is a paper cap? Any other thing I
> should check?
> >
> > This SP600JX has been with me since 1980 when I traded a complete
> and original with cabinet RCA AR88 for it. Yes, I did it but at the
> time it seemed reasonable and I wanted that SP600. The sad part is
> that the AR88 was probably trashed after its owner passed away years
> after the trade. Anyway is time to give this old friend some TLC. I
> could lift this thing off the floor so easily back then..wonder what
> happened....
> >
> > 73s
> >

> > Guido Santacana KP4FAR
> >
> > Sent from my iPad
> > -----
> > BoatAnchors mailing list
> > BoatAnchors at theporch.com <mailto:BoatAnchors at theporch.com>
> > <https://minime.theporch.com/mailman/listinfo/boatanchors>
> >
> > --
> > Richard Knoppow
> > 1oldlens1 at ix.netcom.com <mailto:1oldlens1 at ix.netcom.com>
> > WB6KBL
> >
> > -----
> > BoatAnchors mailing list
> > BoatAnchors at theporch.com <mailto:BoatAnchors at theporch.com>
> > <https://minime.theporch.com/mailman/listinfo/boatanchors>
> >
> > --
> > Richard Knoppow
> > 1oldlens1 at ix.netcom.com <mailto:1oldlens1 at ix.netcom.com>
> > WB6KBL

--
Richard Knoppow
1oldlens1 at ix.netcom.com
WB6KBL

From ddillman at igc.org Mon Sep 7 11:46:20 2015
From: ddillman at igc.org (Richard Dillman)
Date: Mon, 7 Sep 2015 08:46:20 -0700 (GMT-07:00)
Subject: [BoatAnchors] [Radio Officers, &c] K6KPH Bulletin Service
Message-ID: <8953806.1441640780850.JavaMail.root@elwamui-royal.atl.sa.earthlink.net>

From: cris greggio

Hello, what about publishing somewhere on the web, some parts of the reference books used to train R/Os in those days? On archive.org it can be downloaded that used in UK. In my humble opinion the way sea going R/Os operated during commercial tfc should be preserved. This idea of operating KPH on ham bands the same way is excellent. It should be spread deeper so to attract radio amateurs to learn a bit of that profession. And to continue to keep in life the professional Radiotelegraphy.

73 de Cris - IZ3CQI

We certainly agree with everything you have said OM.

The only book we have found that really explains commercial seagoing radio operations - everything from coming aboard ship to keeping an abstract - is Marin Radio Manual by Strichartz published by the Cornell Maritime Press. The editions we have seen are all published during the later years of WWII. It's a fascinating read.

Sadly, we don't have the ability to scan this book and make it available on line. But if you find one in a used book shop for an acceptable price it's certainly worth adding to your library.

VY 73,

RD

=====
Richard Dillman, T2-GB-061170
Chief Operator, Coast Station KSM
Maritime Radio Historical Society
<http://www.radiomarine.org>
=====

From listown at nanniandjack.com Mon Sep 7 13:34:23 2015
From: listown at nanniandjack.com (Jack G F Hill)
Date: Mon, 07 Sep 2015 12:34:23 -0500
Subject: [BoatAnchors] Signal-to-Noise on the list
Message-ID: <55EDCA9F.4040508@nanniandjack.com>

Good people of BoatAnchors-

I just looked over Digest Volume 229, Issue 1 and noted that apparently people have forgotten to trim the text being replied to, down to a level where context is preserved and redundancy is eliminated... In this particular instance there were several generations of full messages, complete with footers contained in a few parts of a "conversation" between two members.

Is it truly asking too much to request that, for the sake of POLITENESS, when you respond to a post, you swipe your mouse across the parts of the message you are answering that have no impact on what you are saying, and delete that?

This is ****NOT**** about "bandwidth... it is about SIGNAL-to-NOISE, and when adjacent articles in a digest repeat the entire preceding conversation in addition to perhaps a single paragraph, that constitutes NOISE!

(Sarcasm on) For those who are having trouble mastering the art of swiping your mouse and deleting text, I will gladly conduct lessons, on your computer, at your convenience (Sarcasm off)

No one is in posting "jail" for this, but we agreed long ago that repeating in totality was annoying, bothersome, unnecessary, and rude.

--

Jack Hill, W4KH - BoatAnchors Listowner/Archiver
listown at nanniandjack.com

"Plus ca change, plus c'est la meme chose"

"Il n'y a que les idiots qui ne changent jamais d'idee"

From 1oldlens1 at ix.netcom.com Mon Sep 7 13:43:39 2015

From: 1oldlens1 at ix.netcom.com (Richard Knoppow)

Date: Mon, 7 Sep 2015 10:43:39 -0700

Subject: [BoatAnchors] [Radio Officers, &c] K6KPH Bulletin Service

In-Reply-To: <8953806.1441640780850.JavaMail.root@elwamui-royal.atl.sa.earthlink.net>

References: <8953806.1441640780850.JavaMail.root@elwamui-royal.atl.sa.earthlink.net>

Message-ID: <55EDCCCB.8030103@ix.netcom.com>

Thank you for the title. I have also been looking for something like this and found a copy on Amazon for a reasonable price.

If its really good perhaps you could obtain a copy and ask Pete Millet to scan it and put it on his site www.tubebooks.org It fits in with the stuff he has there.

On 9/7/2015 8:46 AM, Richard Dillman via BoatAnchors wrote:

> From: cris greggio

>

> Hello, what about publishing somewhere on the web, some parts of the reference books used to train R/Os in those days? On archive.org it can be downloaded that used in UK. In my humble opinion the way sea going R/Os operated during commercial tfc should be preserved. This idea of operating KPH on ham bands the same way is excellent. It should be spread deeper so to attract radio amateurs to learn a bit of that profession. And to contonue to keep in life the professional Radiotelegraphy.

>

> 73 de Cris - IZ3CQI

>

> -----

>
> We certainly agree with everything you have said OM.
>
> The only book we have found that really explains commercial seagoing radio
operations - everything from coming aboard ship to keeping an abstract - is Marin
Radio Manual by Strichartz published by the Cornell Maritime Press. The editions
we have seen are all published during the later years of WWII. It's a fascinating
read.
>
> Sadly, we don't have the ability to scan this book and make it available on
line. But if you find one in a used book shop for an acceptable price it's
certainly worth adding to your library.
>
> VY 73,
>
> RD
>
> =====
> Richard Dillman, T2-GB-061170
> Chief Operator, Coast Station KSM
> Maritime Radio Historical Society
> <http://www.radiomarine.org>
> =====
> -----
> BoatAnchors mailing list
> BoatAnchors at theporch.com
> <https://minime.theporch.com/mailman/listinfo/boatanchors>
>

--
Richard Knoppow
1oldlens1 at ix.netcom.com
WB6KBL

From gsantacana at gmail.com Mon Sep 7 14:18:41 2015
From: gsantacana at gmail.com (Guido Santacana)
Date: Mon, 7 Sep 2015 14:18:41 -0400
Subject: [BoatAnchors] SP600JX
In-Reply-To: <55ED1D2D.6010203@ix.netcom.com>
References: <E7E1B7C4-2900-4EC7-965A-A2D24BAFAFC8@gmail.com>
<55EC6D07.1070505@ix.netcom.com>
<45AA90E5-269A-478C-A0AC-BF26E38C68F7@gmail.com>
<55ED0AE0.9050200@ix.netcom.com>
<CA01yix3jjiltFzqFotsshqgJQNVD_K6z9XugNU+p-g++i8DZUQ@mail.gmail.com>
<55ED1D2D.6010203@ix.netcom.com>
Message-ID: <6EA754B3-0547-45AD-AD76-F3542F04435F@gmail.com>

My second AR88 had a meter but it was a National one. Many WWII receivers did not have meters. Russian and Chinese cold war sets do not have signal level meters. Most just have meters that show plate and filament voltages. The Chinese 222-1 set, a BA by all definitions, is a 50s technology radio built in the 70s. The meter not only reads plate and filament voltages but also screen voltages from all the main sections of the circuit. A couple of those measurements can be used as a signal level meter.

The AR88 cabinet was huge but it looked nice in it. In wish I found one of those around here.

The SP600 is going back in the shelf but all my shelves have mains and antenna connections. It is a logistical nighmare but it works and I keep it safe. I use them all regularly. Otherwise what's the fun of having and working on them. For the Warsaw pact sets I had to build power supplies. In one case the filament voltage is 2.5V.

Well, labor day weekend is over, then SP600 is healthy again. Thanks for the help guys.

73s

Guido Santacana KP4FAR

Sent from my iPad

On Sep 7, 2015, at 1:14 AM, Richard Knoppow <1oldlens1 at ix.netcom.com>

>> >

>> > 73s

>> >

>> > Guido Santacana KP4FAR

>> >

>> > Sent from my iPad

>> >

>> > -----
>> > BoatAnchors mailing list

>> > BoatAnchors at theporch.com

>> > <https://minime.theporch.com/mailman/listinfo/boatanchors>

>> >

>> > --

>> > Richard Knoppow

>> > 1oldlens1 at ix.netcom.com

>> > WB6KBL

>> >

>> >

>> > -----
>> > BoatAnchors mailing list

>> > BoatAnchors at theporch.com

>> > <https://minime.theporch.com/mailman/listinfo/boatanchors>

>> >
>> > --
>> > Richard Knoppow
>> > 1oldlens1 at ix.netcom.com
>> > WB6KBL
>
> --
> Richard Knoppow
> 1oldlens1 at ix.netcom.com
> WB6KBL

From ajamas.rn at gmail.com Mon Sep 7 18:28:54 2015
From: ajamas.rn at gmail.com (Katz Ajamas)
Date: Mon, 7 Sep 2015 18:28:54 -0400
Subject: [BoatAnchors] Edebris - BAMA Down
In-Reply-To: <55EC7D09.4060700@cox.net>
References: <55EC7D09.4060700@cox.net>
Message-ID: <CA+kZa5oeB2aVpFz0BZ_EDfmXNe5P_ewQiUiM-1NukrjyUQhHyw@mail.gmail.com>

Dave-

Ed and I have both been very busy with work/jobs. We will try to access tonight. If a site visit is required it may take a week to ten days. We apologize for the trouble.

-Bob ah7i

On Sun, Sep 6, 2015 at 1:51 PM, Dave Hollander via BoatAnchors <boatanchors at theporch.com> wrote:

> Have not been able to get the BAMA mirror - edebris for the past two days.
>
> Any idea what has happened to this wonderful resource?
>
> Tnx and 73,
>
> Dave N7RK
>

From spr at earthlink.net Mon Sep 7 18:43:30 2015
From: spr at earthlink.net (Scott Robinson)
Date: Mon, 7 Sep 2015 15:43:30 -0700
Subject: [BoatAnchors] Edebris - BAMA Down
In-Reply-To: <CA+kZa5oeB2aVpFz0BZ_EDfmXNe5P_ewQiUiM-1NukrjyUQhHyw@mail.gmail.com>
References: <55EC7D09.4060700@cox.net>
<CA+kZa5oeB2aVpFz0BZ_EDfmXNe5P_ewQiUiM-1NukrjyUQhHyw@mail.gmail.com>

Message-ID: <55EE1312.6010605@earthlink.net>

Folks,

No apologies required! I, for one, am enormously grateful for the service you provide. It has been of great use to me over the years.

Peace,

Scott Robinson

On 9/7/15 3:28 PM, Katz Ajamas via BoatAnchors wrote:

> Dave-

>

> Ed and I have both been very busy with work/jobs. We will try to access
> tonight. If a site visit is required it may take a week to ten days. We
> apologize for the trouble.

>

> -Bob ah7i

>

> On Sun, Sep 6, 2015 at 1:51 PM, Dave Hollander via BoatAnchors <
> boatanchors at theporch.com> wrote:

>

>> Have not been able to get the BAMA mirror - edebris for the past two days.

>>

>> Any idea what has happened to this wonderful resource?

>>

>> Tnx and 73,

>>

>> Dave N7RK

>>

>

> -----
> BoatAnchors mailing list
> BoatAnchors at theporch.com
> <https://minime.theporch.com/mailman/listinfo/boatanchors>

>

From 1oldlens1 at ix.netcom.com Mon Sep 7 18:58:17 2015

From: 1oldlens1 at ix.netcom.com (Richard Knoppow)

Date: Mon, 7 Sep 2015 15:58:17 -0700

Subject: [BoatAnchors] Edebris - BAMA Down

In-Reply-To: <55EE1312.6010605@earthlink.net>

References: <55EC7D09.4060700@cox.net>

<CA+kZa5oeB2aVpFz0BZ_EDfmXNe5P_ewQiUiM-1NukrjyUQhHyw@mail.gmail.com>

<55EE1312.6010605@earthlink.net>

Message-ID: <55EE1689.6020908@ix.netcom.com>

Let me second this. The site has been of enormous help to me. I am sure many others applaud your efforts. Good luck with getting it up again.

On 9/7/2015 3:43 PM, Scott Robinson via BoatAnchors wrote:

> Folks,

>

> No apologies required! I, for one, am enormously grateful for the
> service you provide. It has been of great use to me over the years.

>

> Peace,

>

> Scott Robinson

>

> On 9/7/15 3:28 PM, Katz Ajamas via BoatAnchors wrote:

>> Dave-

>>

>> Ed and I have both been very busy with work/jobs. We will try to access
>> tonight. If a site visit is required it may take a week to ten days. We
>> apologize for the trouble.

>>

>> -Bob ah7i

>>

>> On Sun, Sep 6, 2015 at 1:51 PM, Dave Hollander via BoatAnchors <
>> boatanchors at theporch.com> wrote:

>>

>>> Have not been able to get the BAMA mirror - edebri for the past
>>> two days.

>>>

>>> Any idea what has happened to this wonderful resource?

>>>

>>> Tnx and 73,

>>>

>>> Dave N7RK

>>>

>>

>> -----
>> BoatAnchors mailing list

>> BoatAnchors at theporch.com

>> <https://minime.theporch.com/mailman/listinfo/boatanchors>

>>

>

> -----
> BoatAnchors mailing list

> BoatAnchors at theporch.com

> <https://minime.theporch.com/mailman/listinfo/boatanchors>

>

--

Richard Knoppow

1oldlens1 at ix.netcom.com

WB6KBL

From wa5jci at basicisp.net Mon Sep 7 19:16:59 2015
From: wa5jci at basicisp.net (Spencer Petri)
Date: Mon, 07 Sep 2015 18:16:59 -0500
Subject: [BoatAnchors] Edebris - BAMA Down
In-Reply-To: <CA+kZa5oeB2aVpFz0BZ_EDfmXNe5P_ewQiUiM-1NukrjyUQhHyw@mail.g
mail.com>
References: <55EC7D09.4060700@cox.net>
<CA+kZa5oeB2aVpFz0BZ_EDfmXNe5P_ewQiUiM-1NukrjyUQhHyw@mail.gmail.com>
Message-ID: <20150907161705.954CE1A6@m0086584.pops.net>

>
>Ed and I have both been very busy with work/jobs. We will try to access
>tonight. If a site visit is required it may take a week to ten days. We
>apologize for the trouble.
>
>-Bob ah7i

You do good works.

de Pete WA5JCI

From ae4r at cox.net Mon Sep 7 20:40:08 2015
From: ae4r at cox.net (Mike Steussy)
Date: Mon, 7 Sep 2015 20:40:08 -0400
Subject: [BoatAnchors] NC-400 articles in ER
Message-ID: <38F2B7DF-3F1C-47DD-84D4-A55887AFCDD7@cox.net>

Would anyone know Electric Radio issues within the last ten years that contained
articles on restoring a National NC-400 receiver. If so, please advise directly.
(I'm unable to access the on-line index.)

TNX es 73, Mike AE4R
ae4r at cox.net

From ae4r at cox.net Mon Sep 7 23:37:48 2015
From: ae4r at cox.net (Mike Steussy)
Date: Mon, 7 Sep 2015 23:37:48 -0400
Subject: [BoatAnchors] NC-400 articles in ER (followup)
In-Reply-To: <38F2B7DF-3F1C-47DD-84D4-A55887AFCDD7@cox.net>
References: <38F2B7DF-3F1C-47DD-84D4-A55887AFCDD7@cox.net>

Message-ID: <306FA14F-E3DC-4434-AFDE-924BB22815D1@cox.net>

Thanks to Rodger Singley WQ9E, B. Smith, Roy Morgan K1LKY, John Dilks K2TQN and others for helping me.

The answer is a series of articles by Osterwald, ERs for Feb-Mar-Apr 2011. Thanks to all. A very interesting radio.

> On Sep 7, 2015, at 8:40 PM, Mike Steussy <ae4r at cox.net> wrote:

>

> Would anyone know Electric Radio issues within the last ten years that contained articles on restoring a National NC-400 receiver. If so, please advise directly. (I'm unable to access the on-line index.)

73 & have fun on the air with your BAs,
Mike Steussy AE4R

From franklin6209 at att.net Tue Sep 8 13:47:23 2015

From: franklin6209 at att.net (Gary Franklin)

Date: Tue, 8 Sep 2015 13:47:23 -0400

Subject: [BoatAnchors] HRO 50T

Message-ID: <55EF1F2B.5010403@att.net>

Wondering how many coils sets National made for the HRO 50? I have the following sets:

A, B, C, D, E , F, G, H, J, AA, AB, AC

Gary, K8BKB

From wb3fau55 at neo.rr.com Tue Sep 8 19:13:42 2015

From: wb3fau55 at neo.rr.com (wb3fau55 at neo.rr.com)

Date: Tue, 8 Sep 2015 19:13:42 -0400

Subject: [BoatAnchors] HRO 50T

In-Reply-To: <55EF1F2B.5010403@att.net>

Message-ID: <20150908231342.5HTYF.21287.root@cdptpa-web06>

Gary, I think you got them all! Looks like you got all the long wave coils. You need to find an old ARRL handbook from the early 50s, the catalog sections of these have National Ads, they will tell you if you are missing any. If no one else responds, I call look it up for you. Russ.

---- Gary Franklin via BoatAnchors <boatanchors at theporch.com> wrote:

> Wondering how many coils sets National made for the HRO 50? I have the
> following sets:

> A, B, C, D, E , F, G, H, J, AA, AB, AC

>

> Gary, K8BKB
> -----
> BoatAnchors mailing list
> BoatAnchors at theporch.com
> <https://minime.theporch.com/mailman/listinfo/boatanchors>

From nemozilch at gmail.com Wed Sep 9 23:05:46 2015
From: nemozilch at gmail.com (nemo zilch)
Date: Wed, 9 Sep 2015 23:05:46 -0400
Subject: [BoatAnchors] Signal to Noise on list
Message-ID: <CA03hnUJEkc4xxsKXBygHrFx6svNQ9B6EhaghSJ7x==Yyte=Yxw@mail.gmail.com>

Amen
Bob W4AOS

--

=====

From navy.radio at gmail.com Thu Sep 10 12:58:20 2015
From: navy.radio at gmail.com (Nick England)
Date: Thu, 10 Sep 2015 12:58:20 -0400
Subject: [BoatAnchors] almost free to good home - panadaptor manual
Message-ID: <CAB55hNctUnMA1nEQW-WdTS6W_4X91V9h24GDZvsgZQQ_xBxe_A@mail.gmail.com>

Original Panadaptor manual Model PCA-2 Type T-200
The cover says price 50 cents so I'll stick with that (plus postage)
schematic is dated 1946 - no other date on manual.

Rules of Ware apply -
Additional terms and conditions- offer void where prohibited by law,
no minors allowed, limit one per customer, not open to employees of
Panoramic Radio Corp or their families, Panoramic display may not be
for everyone. Ask your doctor if you can use a Panadaptor. Minor side
effects may include defenestration, debarkation, and defoliation.
Consult a physician if Vertical Position Control remains at maximum
for more than 4 hours.

Nick England K4NYW
www.navy-radio.com

From landn2 at frontier.com Fri Sep 11 01:46:56 2015
From: landn2 at frontier.com (Liles and Naomi Garcia)

Date: Thu, 10 Sep 2015 22:46:56 -0700
Subject: [BoatAnchors] Many Thanks To Nick For Shelby Pictures!!
Message-ID: <OBEDKFDGHEPDGADPPEHF0EIEFFAA.landn2@frontier.com>

Good evening Everybody,

Just a short note from our West Coast thanking Nick for the great Shelby pictures!!

Best regards from Aloha, Oregon,
Liles Garcia
landn2 at frontier.com

From n7rk at cox.net Sat Sep 12 13:45:59 2015
From: n7rk at cox.net (Dave Hollander)
Date: Sat, 12 Sep 2015 10:45:59 -0700
Subject: [BoatAnchors] FS: Telegraph Keys, Extremely Rare Bendix IF-9,
and Odds and Ends
Message-ID: <55F464D7.4030502@cox.net>

Various Items for sale. I do not have any more Henry 2K parts.

Prefer Paypal but will accept other forms of payment. I will ship international. NO TRADES.

73 and tnx for looking.

Dave N7RK

1936 Vibroplex Original Bug with Wedge- \$125 plus shipping
The serial number is 109660 dating this bug to 1936. This key appears to be complete and should clean up nicely. Being it has a wedge, this key probably belonged to a railroad telegrapher.
<http://n7rk.com/radiostuff9/1936vibroplex.jpg>
<http://n7rk.com/radiostuff9/1936vibroplex4.jpg>

Autronic Keyer Paddle - \$100 plus shipping
Perfect for your 1960's Hallicrafters or Hammarlund keyer. This is a single-lever paddle, produced by Electrophysics in the 1960's. This is in nice shape but does have a few paint chips which can be seen in the photos.
http://n7rk.com/radiostuff9/autronic_paddle.jpg
http://n7rk.com/radiostuff9/autronic_paddle4.jpg

Extremely Rare Bendix IF-9 Frequency Indicator, Unusual BC-221 Type Unit - \$500 plus shipping. Looks like a repackaged BC-221. The serial number is 13. The unit works and is in very nice shape for being over 70 years old. It has the calibration booklet. The specs for this unit can be seen in the last picture which is the page from the 1941 Bendix Aviation Radio catalog.

<http://n7rk.com/radiostuff9/bc221unusual.jpg>

<http://n7rk.com/radiostuff9/bc221unusual2.jpg>

<http://n7rk.com/radiostuff9/bc221unusual3.jpg>

<http://n7rk.com/radiostuff9/bc221unusual4.jpg>

<http://n7rk.com/radiostuff9/bc221unusual7.jpg>

<http://n7rk.com/radiostuff9/BendixIF9.jpg>

<http://n7rk.com/radiostuff9/Bendixif9specs.jpg>

1930's RCA TMV-97-C Test Oscillator - \$35 plus shipping

RCA TMV-97-C Test Oscillator. This is a two tube battery operated unit. It has both tubes. The leather handle is long gone. This was in a 1938 RCA catalog.

http://n7rk.com/radiostuff9/rca_testosc.jpg

http://n7rk.com/radiostuff9/rca_testosc2.jpg

Henry 2K Enclosure - \$90 plus shipping

Good for an amplifier or tuner project

<http://n7rk.com/radiostuff9/henry2kenclosure.jpg>

<http://n7rk.com/radiostuff9/henry2kenclosure2.jpg>

<http://n7rk.com/radiostuff9/henry2kenclosure3.jpg>

<http://n7rk.com/radiostuff9/henry2kenclosure4.jpg>

Antenna Changeover Relay Assembly from Henry 2K - \$30 plus shipping

This is the antenna changeover relay assembly from a Henry 2K amp with a bunch of other good parts such as a Millen high voltage connector, 11 pin chassis connector, RF choke and more.

http://n7rk.com/radiostuff9/2k_relay_etc.jpg

http://n7rk.com/radiostuff9/2k_relay_etc2.jpg

http://n7rk.com/radiostuff9/2k_relay_etc3.jpg

From ddillman at igc.org Sat Sep 12 16:20:44 2015

From: ddillman at igc.org (Richard Dillman)

Date: Sat, 12 Sep 2015 13:20:44 -0700 (GMT-07:00)

Subject: [BoatAnchors] K6KPH Bulletin Service

Message-ID: <15124123.1442089244593.JavaMail.root@mswamui-backed.atl.sa.earthlink.net>

K6KPH will resume testing the MRHS bulletin service today on 3550, 7050 and new

frequency for bulletins 18097.5 at 1500 Pacific time/2300Z of following the code practice qualifying run if that runs past 2300Z. We seek your comments and reports. Please send a reply to this email or to K6KPH at radiomarine.org

VY 73,

RD

=====
Richard Dillman, T2-GB-061170
Chief Operator, Coast Station KSM
Maritime Radio Historical Society
<http://www.radiomarine.org>
=====

From n7rk at cox.net Mon Sep 14 18:57:14 2015
From: n7rk at cox.net (Dave Hollander)
Date: Mon, 14 Sep 2015 15:57:14 -0700
Subject: [BoatAnchors] Hammarlund SP-600JX Cabinet Color
Message-ID: <55F750CA.1020107@cox.net>

Was wondering about the color of the original Hammarlund factory enclosure for the SP-600JX receivers. Gray or Black?

Tnx and 73,

Dave N7RK

From 1oldlens1 at ix.netcom.com Tue Sep 15 00:29:49 2015
From: 1oldlens1 at ix.netcom.com (Richard Knoppow)
Date: Mon, 14 Sep 2015 21:29:49 -0700
Subject: [BoatAnchors] Hammarlund SP-600JX Cabinet Color
References: <55F750CA.1020107@cox.net>
Message-ID: <B30E448D7B374AAEADAC2D624EC81E3B@VALUED20606295>

The cabinets were a medium-dark bluish gray, a couple of shades darker than the front panels.

----- Original Message -----

From: "Dave Hollander via BoatAnchors"
<boatanchors at theporch.com>
To: "BOATANCHORS" <boatanchors at mailman.qth.net>;
<Boatanchors at puck.nether.net>; "Old Tube Radios"
<boatanchors at theporch.com>
Sent: Monday, September 14, 2015 3:57 PM
Subject: [BoatAnchors] Hammarlund SP-600JX Cabinet Color

> Was wondering about the color of the original Hammarlund
> factory enclosure for the SP-600JX receivers. Gray or
> Black?
>
> Tnx and 73,
>
> Dave N7RK
--

Richard Knoppow
Los Angeles, CA, USA
dickburk at ix.netcom.com

From 1oldlens1 at ix.netcom.com Tue Sep 15 00:16:27 2015
From: 1oldlens1 at ix.netcom.com (Richard Knoppow)
Date: Mon, 14 Sep 2015 21:16:27 -0700
Subject: [BoatAnchors] Hammarlund SP-600JX Cabinet Color
In-Reply-To: <55F750CA.1020107@cox.net>
References: <55F750CA.1020107@cox.net>
Message-ID: <55F79B9B.9060602@ix.netcom.com>

The cabinets were of a dark bluish gray color, a couple of shades darker than the front panels.

On 9/14/2015 3:57 PM, Dave Hollander via BoatAnchors wrote:

> Was wondering about the color of the original Hammarlund factory
> enclosure for the SP-600JX receivers. Gray or Black?
>
> Tnx and 73,
>
> Dave N7RK
>
> -----
> BoatAnchors mailing list
> BoatAnchors at theporch.com
> <https://minime.theporch.com/mailman/listinfo/boatanchors>
>

--
Richard Knoppow
1oldlens1 at ix.netcom.com
WB6KBL

From kd5byb at kd5byb.net Sun Sep 20 13:34:27 2015
From: kd5byb at kd5byb.net (Ben Hall)
Date: Sun, 20 Sep 2015 12:34:27 -0500
Subject: [BoatAnchors] Lambda Power Supplies
In-Reply-To: <B30E448D7B374AAEADAC2D624EC81E3B@VALUED20606295>
References: <55F750CA.1020107@cox.net>
<B30E448D7B374AAEADAC2D624EC81E3B@VALUED20606295>
Message-ID: <55FEEE23.6030102@kd5byb.net>

Good afternoon all,

A Lambda model C-281 power supply was dropped off at my door the other day, bought off the e-place.

The C-281 is a rack-mount power supply, covering 125 VDC to 325 VDC in four ranges, with a maximum output current of 200 mA, selected by two toggle switches that both select different taps on the power transformer, and select different resistors in the feedback path.

It joins a Lambda model 25, which is a bench-top power supply.

the C-281 is a heavy unit - pushing nearly 60 pounds. One person on a tube radio forum noted that Lambda power supplies are the densest material known to man. ;) I believe it! Who know anything in a 3U package would weigh near 60 pounds. :)

Tube complement is a pair of 5U4 rectifiers, six 6W6 pass tubes, two 12AX7's, and a 5651 voltage reference tube.

Even though the packing job was pretty horrible, the unit arrived only with one 6W6 pass tube bent a bit with a broken center key and a slight bend in one of the corners of the panel. Both were remedied - the panel with bending by an adjustable wrench, the tube with some superglue and a pair of pliers to straighten the pins.

It is marked DIAMOND ORDNANCE FUZE LABORATORIES - PROPERTY OF THE U.S. GOVERNMENT. (not anymore!) Turns out Diamond was a researcher for the Army who later had the lab named after him.

The TV-7 showed both of the 12AX7's to be very low, so they were replaced with a pair of 12AX7's from my used tube inventory. I had a heck of a time finding a pair of 12AX7's that would test above the TV-7's minimum. Probably tested at least ten of them before I found two good ones.

I also replaced one commercial and one rather-badly-done homebrew solid-state rectifier replacement and replaced them with two Tung-Sol 5U4-GB rectifiers from my used tube inventory.

One of the things I love about Lambda power supplies of this era is the quality of construction. The C-281 uses all oil-filled caps - no electrolytics - and no wax-paper caps. IIRC, the model 25 is the same way - no electro's, no wax-paper caps.

The power cord was a stiff, cracked wreck, so it was replaced. Power-up on the VARIAC was uneventful; the supply came up to 150 VDC and stayed there.

With no load on it, it draws nearly 100 watts. ;)

Adjusting the DC vernier I noted that I could exceed the upper voltage of the lowest range, and couldn't reach the lowest voltage of the lowest range. The manual has a calibration procedure which I will run shortly to remedy that.

This supply is a nice addition to the power supplies I have available to power vintage tube equipment.

thanks much and 73,
ben, kd5byb

From 4cx250b at miamioh.edu Sun Sep 20 13:44:39 2015
From: 4cx250b at miamioh.edu (MU 4CX250B)
Date: Sun, 20 Sep 2015 11:44:39 -0600
Subject: [BoatAnchors] Lambda Power Supplies
In-Reply-To: <55FEEE23.6030102@kd5byb.net>
References: <55F750CA.1020107@cox.net>
<B30E448D7B374AAEADAC2D624EC81E3B@VALUED20606295>
<55FEEE23.6030102@kd5byb.net>
Message-ID: <-5709074110302706337@unknownmsgid>

Nice power supply, Ben! I use Lambda linear 12V power supplies for all my modern rigs, and for my variable bench supply. In 30 years, never had one fail. They're designed for 24/7 use at full load.
73,
Jim w8zr

Sent from my iPhone

> On Sep 20, 2015, at 11:35 AM, Ben Hall via BoatAnchors <boatanchors at theporch.com> wrote:
>
> Good afternoon all,
>
> A Lambda model C-281 power supply was dropped off at my door the other day,

bought off the e-place.

>

> The C-281 is a rack-mount power supply, covering 125 VDC to 325 VDC in four ranges, with a maximum output current of 200 mA, selected by two toggle switches that both select different taps on the power transformer, and select different resistors in the feedback path.

>

> It joins a Lambda model 25, which is a bench-top power supply.

>

> the C-281 is a heavy unit - pushing nearly 60 pounds. One person on a tube radio forum noted that Lambda power supplies are the densest material known to man. ;) I believe it! Who know anything in a 3U package would weigh near 60 pounds. :)

>

> Tube complement is a pair of 5U4 rectifiers, six 6W6 pass tubes, two 12AX7's, and a 5651 voltage reference tube.

>

> Even though the packing job was pretty horrible, the unit arrived only with one 6W6 pass tube bent a bit with a broken center key and a slight bend in one of the corners of the panel. Both were remedied - the panel with bending by an adjustable wrench, the tube with some superglue and a pair of pliers to straighten the pins.

>

> It is marked DIAMOND ORDNANCE FUZE LABORATORIES - PROPERTY OF THE U.S. GOVERNMENT. (not anymore!) Turns out Diamond was a researcher for the Army who later had the lab named after him.

>

> The TV-7 showed both of the 12AX7's to be very low, so they were replaced with a pair of 12AX7's from my used tube inventory. I had a heck of a time finding a pair of 12AX7's that would test above the TV-7's minimum. Probably tested at least ten of them before I found two good ones.

>

> I also replaced one commercial and one rather-badly-done homebrew solid-state rectifier replacement and replaced them with two Tung-Sol 5U4-GB rectifiers from my used tube inventory.

>

> One of the things I love about Lambda power supplies of this era is the quality of construction. The C-281 uses all oil-filled caps - no electrolytics - and no wax-paper caps. IIRC, the model 25 is the same way - no electro's, no wax-paper caps.

>

> The power cord was a stiff, cracked wreck, so it was replaced. Power-up on the VARIAC was uneventful; the supply came up to 150 VDC and stayed there.

>

> With no load on it, it draws nearly 100 watts. ;)

>

> Adjusting the DC vernier I noted that I could exceed the upper voltage of the lowest range, and couldn't reach the lowest voltage of the lowest range. The

manual has a calibration procedure which I will run shortly to remedy that.
>
> This supply is a nice addition to the power supplies I have available to power
vintage tube equipment.
>
> thanks much and 73,
> ben, kd5byb
> -----
> BoatAnchors mailing list
> BoatAnchors at theporch.com
> <https://minime.theporch.com/mailman/listinfo/boatanchors>

From w9ac at arrl.net Sun Sep 20 14:02:09 2015
From: w9ac at arrl.net (Paul Christensen)
Date: Sun, 20 Sep 2015 14:02:09 -0400
Subject: [BoatAnchors] Lambda Power Supplies
In-Reply-To: <-5709074110302706337@unknownmsgid>
References: <55F750CA.1020107@cox.net>
<B30E448D7B374AAEADAC2D624EC81E3B@VALUED20606295>
<55FEEE23.6030102@kd5byb.net> <-5709074110302706337@unknownmsgid>
Message-ID: <001b01d0f3ce\$781b6c20\$68524460\$@arrl.net>

Remote voltage sense is a very nice feature of the Lambda supplies. Within reasonable limits, their supplies can adjust for changes in the load and provide it with constant voltage. The load voltage is sampled with an extra wire pair, and small gauge wire can be used since the sample does not present a high-current demand.

I have never measured the dynamic performance of Lambda's load sensing to determine how quickly the auto-voltage adjustment responds to current demand. Anyone?

Paul, W9AC

-----Original Message-----

From: BoatAnchors [mailto:boatanchors-bounces at theporch.com] On Behalf Of MU 4CX250B via BoatAnchors
Sent: Sunday, September 20, 2015 1:45 PM
To: Ben Hall <kd5byb at kd5byb.net>
Cc: boatanchors at theporch.com; benjamindh.fc35415 at m.evernote.com
Subject: Re: [BoatAnchors] Lambda Power Supplies

Nice power supply, Ben! I use Lambda linear 12V power supplies for all my modern rigs, and for my variable bench supply. In 30 years, never had one fail. They're designed fir 24/7 use at full load.

73,

Jim w8zr

Sent from my iPhone

> On Sep 20, 2015, at 11:35 AM, Ben Hall via BoatAnchors
<boatanchors at theporch.com> wrote:

>

> Good afternoon all,

>

> A Lambda model C-281 power supply was dropped off at my door the other
day, bought off the e-place.

>

> The C-281 is a rack-mount power supply, covering 125 VDC to 325 VDC in
four ranges, with a maximum output current of 200 mA, selected by two toggle
switches that both select different taps on the power transformer, and
select different resistors in the feedback path.

>

> It joins a Lambda model 25, which is a bench-top power supply.

>

> the C-281 is a heavy unit - pushing nearly 60 pounds. One person on a
> tube radio forum noted that Lambda power supplies are the densest
> material known to man. ;) I believe it! Who know anything in a 3U
> package would weigh near 60 pounds. :)

>

> Tube complement is a pair of 5U4 rectifiers, six 6W6 pass tubes, two
12AX7's, and a 5651 voltage reference tube.

>

> Even though the packing job was pretty horrible, the unit arrived only
with one 6W6 pass tube bent a bit with a broken center key and a slight bend
in one of the corners of the panel. Both were remedied - the panel with
bending by an adjustable wrench, the tube with some superglue and a pair of
pliers to straighten the pins.

>

> It is marked DIAMOND ORDNANCE FUZE LABORATORIES - PROPERTY OF THE U.S.
GOVERNMENT. (not anymore!) Turns out Diamond was a researcher for the Army
who later had the lab named after him.

>

> The TV-7 showed both of the 12AX7's to be very low, so they were replaced
with a pair of 12AX7's from my used tube inventory. I had a heck of a time
finding a pair of 12AX7's that would test above the TV-7's minimum.
Probably tested at least ten of them before I found two good ones.

>

> I also replaced one commercial and one rather-badly-done homebrew
solid-state rectifier replacement and replaced them with two Tung-Sol 5U4-GB
rectifiers from my used tube inventory.

>

> One of the things I love about Lambda power supplies of this era is the
quality of construction. The C-281 uses all oil-filled caps - no

electrolytics - an no wax-paper caps. IIRC, the model 25 is the same way - no electro's, no wax-paper caps.

>

> The power cord was a stiff, cracked wreck, so it was replaced. Power-up on the VARIAC was uneventful; the supply came up to 150 VDC and stayed there.

>

> With no load on it, it draws nearly 100 watts. ;)

>

> Adjusting the DC vernier I noted that I could exceed the upper voltage of the lowest range, and couldn't reach the lowest voltage of the lowest range. The manual has a calibration procedure which I will run shortly to remedy that.

>

> This supply is a nice addition to the power supplies I have available to power vintage tube equipment.

>

> thanks much and 73,

> ben, kd5byb

>

> -----
> BoatAnchors mailing list

> BoatAnchors at theporch.com

> <https://minime.theporch.com/mailman/listinfo/boatanchors>

BoatAnchors mailing list

BoatAnchors at theporch.com

<https://minime.theporch.com/mailman/listinfo/boatanchors>

From kd5byb at kd5byb.net Sun Sep 20 17:28:31 2015

From: kd5byb at kd5byb.net (Ben Hall)

Date: Sun, 20 Sep 2015 16:28:31 -0500

Subject: [BoatAnchors] Lambda Power Supplies

In-Reply-To: <2453954B-0AFA-43EA-9E86-614CF2557864@gmail.com>

References: <55F750CA.1020107@cox.net>

<B30E448D7B374AAEADAC2D624EC81E3B@VALUED20606295>

<55FEEE23.6030102@kd5byb.net>

<2453954B-0AFA-43EA-9E86-614CF2557864@gmail.com>

Message-ID: <55FF24FF.8080106@kd5byb.net>

Hi John and list,

On 9/20/2015 12:52 PM, John Shriver wrote:

> Do check the voltage at the 5651 voltage reference tube, if you have
> an accurate voltmeter. Mine was off, which got all the calibration
> out of whack.

Good suggestion! Checked the 5651 in mine. 102 VDC, yikes, quite far from the rated 87 VDC. Thankfully, I've got a while pile of 5651's, so I popped another one in and it was 86 VDC. Much better.

Was able to readjust the calibration and now its working perfectly. :)

thanks much and 73,
ben, kd5byb

From gumbear at pacbell.net Sun Sep 20 19:45:28 2015
From: gumbear at pacbell.net (Arden Allen)
Date: Sun, 20 Sep 2015 16:45:28 -0700
Subject: [BoatAnchors] Lambda Power Supplies
In-Reply-To: <001b01d0f3ce\$781b6c20\$68524460\$@arrl.net>
References: <55F750CA.1020107@cox.net>
<B30E448D7B374AAEADAC2D624EC81E3B@VALUED20606295>
<55FEEE23.6030102@kd5byb.net> <-5709074110302706337@unknownmsgid>
<001b01d0f3ce\$781b6c20\$68524460\$@arrl.net>
Message-ID: <6A0759B8A7F34C51A0A56F0E1290CD72@KB6NAX>

> I have never measured the dynamic performance of Lambda's load
> sensing to
determine how quickly the auto-voltage adjustment responds to current demand. Anyone?

The actual transient response of a regulator circuit is hidden by the capacitor across the output terminals. When there is a sudden change in load demand the output capacitor supplies current until the regulator responds to keep the voltage across the capacitor constant. What you see in a momentary dip in output voltage is the voltage drop caused by the wiring series resistance before the regulator replaces the capacitor's momentary loss of charge. The capacitor is a virtual instant voltage regulator, its dynamic impedance determined by the RC time constant of the capacitor's capacitance and its series resistance. The much slower response of the regulator is the result of servo loop stability compensation required to keep the regulator from becoming a power oscillator. The power supply's dynamic impedance is the combination of the two. Does that answer your question, Paul?

Arden Allen
KB6NAX

He who is cruel to animals becomes
hard also in his dealings with men.
We can judge the heart of a man by
his treatment of animals.
?Immanuel Kant

From w9ac at arrl.net Mon Sep 21 12:00:29 2015
From: w9ac at arrl.net (Paul Christensen)
Date: Mon, 21 Sep 2015 12:00:29 -0400
Subject: [BoatAnchors] Lambda Power Supplies
In-Reply-To: <6A0759B8A7F34C51A0A56F0E1290CD72@KB6NAX>
References: <55F750CA.1020107@cox.net>
<B30E448D7B374AAEADAC2D624EC81E3B@VALUED20606295>
<55FEEE23.6030102@kd5byb.net> <-5709074110302706337@unknownmsgid>
<001b01d0f3ce\$781b6c20\$68524460\$@arrl.net>
<6A0759B8A7F34C51A0A56F0E1290CD72@KB6NAX>
Message-ID: <000d01d0f486\$a4d32380\$ee796a80\$@arrl.net>

Arden,

Thanks for your detailed explanation!

Paul, W9AC

-----Original Message-----

From: Arden Allen [mailto:gumbear at pacbell.net]
Sent: Sunday, September 20, 2015 7:45 PM
To: Paul Christensen <w9ac at arrl.net>; boatanchors at theporch.com
Subject: Re: [BoatAnchors] Lambda Power Supplies

> I have never measured the dynamic performance of Lambda's
> load sensing to
determine how quickly the auto-voltage adjustment responds to current demand.
Anyone?

The actual transient response of a regulator circuit is hidden by the capacitor across the output terminals. When there is a sudden change in load demand the output capacitor supplies current until the regulator responds to keep the voltage across the capacitor constant. What you see in a momentary dip in output voltage is the voltage drop caused by the wiring series resistance before the regulator replaces the capacitor's momentary loss of charge. The capacitor is a virtual instant voltage regulator, its dynamic impedance determined by the RC time constant of the capacitor's capacitance and its series resistance. The much slower response of the regulator is the result of servo loop stability compensation required to keep the regulator from becoming a power oscillator. The power supply's dynamic impedance is the combination of the two. Does that answer your question, Paul?

Arden Allen
KB6NAX

He who is cruel to animals becomes
hard also in his dealings with men.
We can judge the heart of a man by
his treatment of animals.
?Immanuel Kant

From kb8tad at gmail.com Mon Sep 21 14:18:22 2015
From: kb8tad at gmail.com (Rich Post)
Date: Mon, 21 Sep 2015 14:18:22 -0400
Subject: [BoatAnchors] ARC-5 history question
Message-ID: <CAEJr0Fsi0y8ubjafTh5Z1+0jw0QCHVDnQaf2gxVa=HKk164exA@mail.gmail.com>

Somewhere in the past I recall reading that when Aircraft Radio Corp showed their prototypes of what would become the ARA and ATA and eventually the SCR-274N and ARC-5 sets to the Navy, another much larger company also vying for the contract, upon seeing the very compact yet powerful command transmitters and receivers didn't even bother to show their own prototypes. I have not been able to find corroborating evidence for that. The story seems plausible but might be apocryphal. Given the collective expertise on this list, can any of you shed light on this story?

Tnx de Rich KB8TAD

From WA5CAB at cs.com Mon Sep 21 14:50:55 2015
From: WA5CAB at cs.com (WA5CAB at cs.com)
Date: Mon, 21 Sep 2015 14:50:55 -0400
Subject: [BoatAnchors] ARC-5 history question
Message-ID: <6549.73def9d9.4331ab8f@cs.com>

You probably read it in one of the old Surplus Perversion Handbooks, either Volume 1 or Volume 2. In either the BC-191 or BC-375 article. It was, of course, an obvious case of comparing an old apple to a new orange.

In a message dated 09/21/2015 13:19:53 PM Central Daylight Time,
boatanchors at theporch.com writes:
> Somewhere in the past I recall reading that when Aircraft Radio Corp
> showed
> their prototypes of what would become the ARA and ATA and eventually the
> SCR-274N and ARC-5 sets to the Navy, another much larger company also
> vying
> for the contract, upon seeing the very compact yet powerful command
> transmitters and receivers didn't even bother to show their own
> prototypes. I have not been able to find corroborating evidence for that.
> The story seems plausible but might be apocryphal. Given the collective
> expertise on this list, can any of you shed light on this story?

>
> Tnx de Rich KB8TAD

Robert & Susan Downs - Houston
wa5cab dot com (Web Store)
MVPA 9480

From k7sz at live.com Tue Sep 22 08:14:53 2015
From: k7sz at live.com (Rich Arland)
Date: Tue, 22 Sep 2015 08:14:53 -0400
Subject: [BoatAnchors] WTB/Trade
Message-ID: <BLU172-W41986640CACE8E4136A00FF6450@phx.gbl>

I
have bits and pieces of a Hustler 4BTV HF vertical antenna. Does anyone
on this list happen to have an old 4BTV laying around that you might be
willing to sell? What I need is a "parts unit" so I can make one good vertical
out of parts from a second one.

Should anyone be interested in off-loading an old 4BTV contact me off-list.

Thanks.

Rich Arland
K7SZ
Bent Dipole Ranch, Dacula, GA

Rich Arland
K7SZ
WPE7BYR
Bent Dipole Ranch, Dacula, GA

Author: "The ARRL's Low Power Communications, the Art and Science of QRP" (all 4
editions)

Blog: <http://commobunker.blogspot.com/>

"Faith is not about everything turning out OK. It's about being OK, no matter
how things turn out."

"Every day we are given the opportunity to sign our name to history", Gen. Mark A.
Welsh III, Chief of Staff, USAF

"Ideals are peaceful. History is violent", Ssgt Don "Wardaddy" Collier, 2nd
Armored Division, US Army

From wb3fau55 at neo.rr.com Wed Sep 23 17:51:02 2015
From: wb3fau55 at neo.rr.com (wb3fau55 at neo.rr.com)
Date: Wed, 23 Sep 2015 17:51:02 -0400
Subject: [BoatAnchors] rack panel
Message-ID: <20150923215102.8DERS.30678.root@cdptpa-web01>

Guys- anyone in the area of 16504 in Erie, Pa, need a 6 foot 19in. rack panel?
Good condition, has rear door. Price negotiable, something to trade? 73s Russ.

From arc5 at ix.netcom.com Thu Sep 24 10:57:36 2015
From: arc5 at ix.netcom.com (David Stinson)
Date: Thu, 24 Sep 2015 09:57:36 -0500
Subject: [BoatAnchors] Special PL-259 Right-Angle Adaptors Needed
Message-ID: <0110E77BD85246C58C36CE0C1A90A5BD@DaddyPC>

I'm seeking items for my U.S. Army Signal Corps version
of the "ARC-5" VHF set.

When Western Electric produced the small run of Army
VHF sets, they also produced accessories and connectors
to go with them . One was the M-359 Right Angle
for the PL-259. I need two more of these for the set.

Please see the photo at the link below.

I'm am seeking only this type with this marking:

<http://home.netcom.com/~arc5/www/connectors/WEadaptor.jpg>

Can trade or purchase.

Thanks very much!

73 OM DE Dave AB5S

From arc5 at ix.netcom.com Thu Sep 24 11:02:26 2015
From: arc5 at ix.netcom.com (David Stinson)
Date: Thu, 24 Sep 2015 10:02:26 -0500
Subject: [BoatAnchors] Needed: Special PL-259 Right Angle Adaptors
Message-ID: <583E44E7BED2441AA0832225BD184FC6@DaddyPC>

I'm seeking items for my U.S. Army Signal Corps version

of the "ARC-5" VHF set.

When Western Electric produced the small run of Army VHF sets, they also produced accessories and connectors to go with them . One was the M-359 Right Angle for the PL-259. I need two more of these for the set. Please see the photo at the link below.
I'm am seeking only this type with this marking:

<http://home.netcom.com/~arc5/www/connectors/WEadaptor.jpg>

Can trade or purchase.

Thanks very much!

73 OM DE Dave AB5S

From charlesmorris800 at centurytel.net Thu Sep 24 11:21:56 2015
From: charlesmorris800 at centurytel.net (Charles)
Date: Thu, 24 Sep 2015 10:21:56 -0500
Subject: [BoatAnchors] Lambda Power Supplies
In-Reply-To: <mailman.179.1443106712.247.boatanchors@theporch.com>
References: <mailman.179.1443106712.247.boatanchors@theporch.com>
Message-ID: <B4DBA649389E48F3A8D6FB92BB370D70@CharlesHPLaptop>

-----Original Message-----

From: "Arden Allen" <gumbear at pacbell.net>

When there is a sudden change in load demand the output capacitor supplies current until the regulator responds to keep the voltage across the capacitor constant. What you see in a momentary dip in output voltage is the voltage drop caused by the wiring series resistance before the regulator replaces the capacitor's momentary loss of charge.

Only if the regulator circuit is responding to the load current change rather than (as most older designs I've seen) sensing the load voltage. The output voltage HAS to drop somewhat in order for the error amplifier to sense the change and tell the pass element to increase the voltage. Which does take a finite time.
The higher the gain, the smaller the drop. As you point out, the gain is limited by instability problems and noise pickup.

Also, that "momentary loss of charge" from the output capacitor *is* a voltage dip, since for a capacitor, $Q=CV$.

Additional wiring resistance will, of course, make it worse. My ancient rack-mounted 13.8 volt 40 amp Lambda supply (now THERE is a heavy beast!) has remote sensing capability to help compensate for wiring drops.

-Charles
WB3JOK/0

From gumbear at pacbell.net Thu Sep 24 12:12:30 2015
From: gumbear at pacbell.net (Arden Allen)
Date: Thu, 24 Sep 2015 09:12:30 -0700
Subject: [BoatAnchors] Lambda Power Supplies
In-Reply-To: <B4DBA649389E48F3A8D6FB92BB370D70@CharlesHPLaptop>
References: <mailman.179.1443106712.247.boatanchors@theporch.com>
<B4DBA649389E48F3A8D6FB92BB370D70@CharlesHPLaptop>
Message-ID: <C497D9BDC59343E090FA56886B2B2E1A@KB6NAX>

Hi Charles - Let me correct you on a couple of items:

> Only if the regulator circuit is responding to the load current
> change
rather than (as most older designs I've seen) sensing the load voltage.
The output voltage HAS to drop somewhat in order for the error amplifier to
sense the change and tell the pass element to increase the voltage. Which
does take a finite time. The higher the gain, the smaller the drop.
.....

A voltage regulator senses the change in output voltage as a result of a
change in load. It does not sense the load current unless and until it
switches to a current limiting mode to protect the power supply. The
regulator's **open loop gain** with respect to **closed loop gain** is what
determines the accuracy of voltage regulation. The closed loop gain is the
difference in the regulator's voltage reference and the output voltage. A
250 volt power supply with a 50 volt reference has a closed loop gain of 5.
Here's a good explanation:

<http://electronics.stackexchange.com/questions/43217/open-loop-gain-and-closed-loop-gain-of-op-amp>

> As you point out, the gain is limited by instability problems and
> noise pickup.

Not quite. Instability is not a problem unless a regulator, which is a
feedback amplifier, is poorly designed or suffering from failing components.
Any amplifier experiences increasing phase shift with frequency due to
unavoidable stray capacitance. At DC the phase shift in the loop is 0
(zero) degrees. Eventually a frequency is reached where the phase shift is

180 degrees. At that point if the regulator has a closed loop gain of 1 (one) or more the regulator is an oscillator. If the gain is slightly less than one the regulator will produce a damped oscillation in response to a step change in load. A properly compensated amplifier has a substantially less than one gain at 180 degrees. A rule of thumb for feedback amplifier design is that at a gain of one the phase shift should be no more than 150 degrees, i.e., it having a "phase margin" of 30 degrees.

Arden Allen
KB6NAX

He who is cruel to animals becomes
hard also in his dealings with men.
We can judge the heart of a man by
his treatment of animals.
?Immanuel Kant

From charlesmorris800 at centurytel.net Thu Sep 24 12:27:33 2015
From: charlesmorris800 at centurytel.net (Charles)
Date: Thu, 24 Sep 2015 11:27:33 -0500
Subject: [BoatAnchors] Lambda Power Supplies
In-Reply-To: <C497D9BDC59343E090FA56886B2B2E1A@KB6NAX>
References: <mailman.179.1443106712.247.boatanchors@theporch.com>
<B4DBA649389E48F3A8D6FB92BB370D70@CharlesHPLaptop>
<C497D9BDC59343E090FA56886B2B2E1A@KB6NAX>
Message-ID: <78903042855647D8948DC8F6529A93F1@CharlesHPLaptop>

-----Original Message-----

From: Arden Allen
Sent: Thursday, September 24, 2015 11:12 AM
To: Charles ; boatanchors at theporch.com
Subject: Re: [BoatAnchors] Lambda Power Supplies

Hi Charles - Let me correct you on a couple of items:

> Only if the regulator circuit is responding to the load current
> change
rather than (as most older designs I've seen) sensing the load voltage.
The output voltage HAS to drop somewhat in order for the error amplifier to
sense the change and tell the pass element to increase the voltage. Which
does take a finite time. The higher the gain, the smaller the drop.
.....

A voltage regulator senses the change in output voltage as a result of a

change in load. It does not sense the load current unless and until it switches to a current limiting mode to protect the power supply. The regulator's **open loop gain** with respect to **closed loop gain** is what determines the accuracy of voltage regulation. The closed loop gain is the difference in the regulator's voltage reference and the output voltage. A 250 volt power supply with a 50 volt reference has a closed loop gain of 5. Here's a good explanation:

<http://electronics.stackexchange.com/questions/43217/open-loop-gain-and-closed-loop-gain-of-op-amp>

--- all of which is true, and none of what I disagreed with.

You said, or at least implied, that the output voltage does not change with a transient load because the output capacitor prevents it from changing until the regulator kicks in.

I'm saying the output voltage **MUST** drop, so that the error amplifier has a change to measure and compensate for.

> As you point out, the gain is limited by instability problems and
> noise pickup.

Not quite. Instability is not a problem unless a regulator, which is a feedback amplifier, is poorly designed or suffering from failing components. Any amplifier experiences increasing phase shift with frequency due to unavoidable stray capacitance. At DC the phase shift in the loop is 0 (zero) degrees. Eventually a frequency is reached where the phase shift is 180 degrees. At that point if the regulator has a closed loop gain of 1 (one) or more the regulator is an oscillator. If the gain is slightly less than one the regulator will produce a damped oscillation in response to a step change in load. A properly compensated amplifier has a substantially less than one gain at 180 degrees. A rule of thumb for feedback amplifier design is that at a gain of one the phase shift should be no more than 150 degrees, i.e., it having a "phase margin" of 30 degrees.

Arden Allen
KB6NAX

----- Also true, and I'm well aware of what makes an oscillator out of an amplifier, but again that doesn't address the point I was trying to make. Control loop theory notwithstanding, there is obviously a practical limit to the gain of any real-world regulator, which means there will always be both a transient and a steady-state output voltage change, in addition to wiring voltage drops. Regardless of the size of the output capacitor.

-Charles

From arc5 at ix.netcom.com Thu Sep 24 12:58:14 2015
From: arc5 at ix.netcom.com (David Stinson)
Date: Thu, 24 Sep 2015 11:58:14 -0500 (GMT-05:00)
Subject: [BoatAnchors] [3890_AM] Needed: Special PL-259 Right Angle
Adaptors
Message-ID: <18528141.1443113894806.JavaMail.root@wamui-
junio.atl.sa.earthlink.net>

Sorry I messed up the link and thanks to those who
let me know.
Here's the correct link:

<http://home.netcom.com/~arc5/connectors/WEadaptor.jpg>

From 4cx250b at miamioh.edu Thu Sep 24 14:01:44 2015
From: 4cx250b at miamioh.edu (MU 4CX250B)
Date: Thu, 24 Sep 2015 12:01:44 -0600
Subject: [BoatAnchors] [3890_AM] Needed: Special PL-259 Right Angle
Adaptors
In-Reply-To: <18528141.1443113894806.JavaMail.root@wamui-
junio.atl.sa.earthlink.net>
References: <18528141.1443113894806.JavaMail.root@wamui-
junio.atl.sa.earthlink.net>
Message-ID: <-4967117851100216681@unknownmsgid>

Hi Dave,
I checked my connectors, and unfortunately I only have one that has
the exact Western Electric markings on it. You're welcome to it, if it
would help. I have several other right angle adapters marked M359, but
they don't have the Western electric inscription.
73,
Jim w8zr

Sent from my iPhone

> On Sep 24, 2015, at 10:58 AM, David Stinson via BoatAnchors <boatanchors at
theporch.com> wrote:

>

> Sorry I messed up the link and thanks to those who
> let me know.

> Here's the correct link:

>

> <http://home.netcom.com/~arc5/connectors/WEadaptor.jpg>

>

> -----
> BoatAnchors mailing list

> BoatAnchors at theporch.com

> <https://minime.theporch.com/mailman/listinfo/boatanchors>

From dave at horsfall.org Thu Sep 24 18:19:30 2015
From: dave at horsfall.org (Dave Horsfall)
Date: Fri, 25 Sep 2015 08:19:30 +1000 (EST)
Subject: [BoatAnchors] Special PL-259 Right-Angle Adaptors Needed
In-Reply-To: <0110E77BD85246C58C36CE0C1A90A5BD@DaddyPC>
References: <0110E77BD85246C58C36CE0C1A90A5BD@DaddyPC>
Message-ID: <alpine.BSF.2.11.1509250817320.26917@aneurin.horsfall.org>

On Thu, 24 Sep 2015, David Stinson via BoatAnchors wrote:

> <http://home.netcom.com/~arc5/www/connectors/WEadaptor.jpg>

"Sorry. It looks like there isn't a page on our website at the address you requested (or it may be temporarily unavailable)."

Tried several times.

--

Dave Horsfall DTM (VK2KFU) "Those who don't understand security will suffer."
To a shark, a human tastes awful, which is why they spit that part out.

From arc5 at ix.netcom.com Thu Sep 24 15:47:14 2015
From: arc5 at ix.netcom.com (David Stinson)
Date: Thu, 24 Sep 2015 14:47:14 -0500
Subject: [BoatAnchors] [3890_AM] Needed: Special PL-259 Right Angle Adaptors
In-Reply-To: <-4967117851100216681@unknownmsgid>
References: <18528141.1443113894806.JavaMail.root@wamui-junio.atl.sa.earthlink.net>
<-4967117851100216681@unknownmsgid>
Message-ID: <4403BB8002554764A792568EC0B5FDB7@DaddyPC>

----- Original Message -----

From: "MU 4CX250B" <4cx250b at miamioh.edu>
Subject: Re: [BoatAnchors] [3890_AM] Needed: Special PL-259 Right Angle Adaptors

> Hi Dave,
> I checked my connectors, and unfortunately I only have one that
> has
> the exact Western Electric markings on it. You're welcome to

> it, if it
> would help.

Jim, you are my hero! How can I repay your kindness?
My address is good in QRZ.com

TNX OM ES 73 DE Dave AB5S

From 4cx250b at miamioh.edu Sat Sep 26 13:07:43 2015
From: 4cx250b at miamioh.edu (Jim Garland)
Date: Sat, 26 Sep 2015 11:07:43 -0600
Subject: [BoatAnchors] Watkin-Johnson and Ten-Tec receivers
Message-ID: <021901d0f87d\$dca49b40\$95edd1c0\$miamioh.edu>

A decade or so ago I briefly owned a general coverage Watkins-Johnson HF-1000, which was the commercial version of the military W-J 8711. About the same time I acquired the W-J radio, Ten-Tec came out with the very similar appearing RX-340, which is still in production (\$4450). The two products were so similar in features and front panel layout, that I knew there had to be a common story behind them. I asked a Ten-Tec employee I knew, and he said they both were outgrowths of a government contract. I posted that information on the PREMIUM-RX reflector, which I think may now be defunct. (The reflector focused on high-end microprocessor controlled solid state receivers, circa 1980-90).

Fast forward ten years or so, and today I got an email clarifying my original post, and since I thought it might interest members of this reflector, which includes some of the old PREMIUM-RX

73,

Jim W8ZR

*****]

A while back you wrote a letter printed on amphone.net giving info on the competition for HF radios between Ten-Tec and W-J. The information you were given was a bit garbled by your source, so I thought you would like info from a different source. I was one of the design engineers for the W-J 8711.

The government had been using W-J 8718 receivers, but the price had gotten

to the \$7k or \$8k region and was deemed too expensive. They attempted to use Icom receivers, but were dissatisfied with the performance.

They called a bidder's meeting that I attended, where they announced an open solicitation for a radio with quite detailed specifications, including display and tuning knob size. (This is why the W-J and Ten-Tec offerings appear so similar.) The 20k hour MTBF was part of the original requirement.

The government gave a maximum price of \$4k per radio in quantity..

Both Ten-Tec and W-J were given prototype contracts. The prototype W-J contract was for four radios at \$6k per radio. W-J did all of its development work with internal funding.

I know that for a while, the government purchased radios from both Ten-Tec and W-J. The first few thousand radios we delivered were sold at \$3200.

There was also a 1U rack-mount, remote control variant called the W-J 8723 that became popular with the government. The low power of the 8711 design gave good reliability in this form factor, but I believe that the Ten-Tec unit struggled with over heating in the 1U version.

The 8711 had a ham oriented spin-off called the HF-1000. It was essentially identical except for a painted cabinet. It was sold in modest numbers for under \$4k but was probably too expensive for most.

Over the years, more features were added to the DSP. SAM and notch filtering were not part of the original government requirement. A sub-octave preselector and some other options were added as well.

Parts obsolescence and increasing production costs raised the per unit price to about \$7k and the product was eventually discontinued.

There is a large amount of info on the 8711 on the internet, especially as these radios become available on the surplus market. If I can help you with more information, let me know. I have a late version of the 8711 in my SWL space.

I am still designing HF radios for the same company (now part of DRS). A more recent radio is the SI-8728, which is a much higher performance replacement for the 8723. It has eight independent tuners in a 1U chassis. <https://www.marlboroughcomms.com/media/9291/SI-8728A.pdf> (These specs are ridiculously conservative compared to typical performance.)

The most recent design digitizes the entire HF spectrum all at once. Using proprietary A/D techniques, it outperforms any classic superhet design without overload or loss of sensitivity. (I know that sounds hard to believe, but it really is demonstrably true.)

The low phase noise is almost unbelievable. Of course, this comes at a price, but calculated on a cost per recovered signal basis, it is much lower cost than any single channel receiver (and of course much smaller and lower power). So if you want a superlative receiver that can receive hundreds of signals simultaneously, we have the solution.

73's

Bob Watson

From gumbear at pacbell.net Sat Sep 26 16:03:04 2015
From: gumbear at pacbell.net (Arden Allen)
Date: Sat, 26 Sep 2015 13:03:04 -0700
Subject: [BoatAnchors] Watkin-Johnson and Ten-Tec receivers
In-Reply-To: <021901d0f87d\$dca49b40\$95edd1c0\$miamioh.edu>
References: <021901d0f87d\$dca49b40\$95edd1c0\$miamioh.edu>
Message-ID: <04135EBC2A6E4D4BB2D6EA43DD3D5F8A@KB6NAX>

> A decade or so ago I briefly owned a general coverage Watkins-Johnson HF-1000, which was the commercial version of the military W-J 8711.

.....

Like I phones and the morass of digital devices causing brain damage on a massive scale the 8711 is unrepairable unless one can obtain replacement boards. Back to the good old days, just swap tubes (boards) until the thing works again!

Arden Allen
KB6NAX

He who is cruel to animals becomes
hard also in his dealings with men.
We can judge the heart of a man by
his treatment of animals.
?Immanuel Kant

From arc5 at ix.netcom.com Sat Sep 26 13:29:56 2015
From: arc5 at ix.netcom.com (David Stinson)
Date: Sat, 26 Sep 2015 12:29:56 -0500
Subject: [BoatAnchors] SCR-274N VHF: More on Using Programmable Oscillators.

Message-ID: <9F90072DC5BE4A6A8D9AF241F0EDD47A@DaddyPC>

On subbing programmable oscillators for crystals:

While a real crystal from a reputable supplier like Bry, AF4K, is always preferable, freqs are not always available and multiple custom crystals are for people with more money than I have. This may give you an option.

Most of you know I had success replacing unavailable crystals in the 4-channel "ARC-5" VHF receiver using programmable oscillators. Was listening to aircraft on 122.8 UNICOM carrying jumpers just this lovely morning. The only problem with this 72-year-old receiver is keeping the relays working.

Respectfully- I've heard all the arguments about noise and jitter, etc. These oscillators are much better than the ones made just a few years ago. I've used them on-the-air at fundamental and to feed multipliers. I have had no serious issues. Works with just about any Pentode-based crystal osc. Not enough drive for Triodes like the Pierce.

<http://home.netcom.com/~arc5/ARC5/ProgOsc/ProgOsc.jpg>

I finally got to work on the BC-950 transmitter. \$4 Epson CMOS oscillators at the crystal frequencies (F/18) for 122.8 and 146.52 MC. Powered at 6.25V via one of those inexpensive (2-3 bucks) little "buck" DC-DC converters feed by the 24V A+ buss.

<http://home.netcom.com/~arc5/ARC5/ProgOsc/progosc1.jpg>
<http://home.netcom.com/~arc5/ARC5/ProgOsc/progosc3.jpg>

Mounted that with some hefty double-sided tape. The set works splendidly. Service monitor says the carriers are on 122,7997 and 146.5200 and are clean.

<http://home.netcom.com/~arc5/ARC5/ProgOsc/progosc2.jpg>

I even made a nice contact- Don't ask. I'm tickled to pieces.

GL OM ES 73 DE Dave AB5S

From bluegrassdakine at hotmail.com Sun Sep 27 23:13:59 2015
From: bluegrassdakine at hotmail.com (Raymond Cote)
Date: Sun, 27 Sep 2015 22:13:59 -0500
Subject: [BoatAnchors] RF shielded junction box
Message-ID: <BAY180-W4403DF2C22A2F941D29A6DA94F0@phx.gbl>

I have for sale an RF shielded box. It measures 14" by 16" inside dimensions and it is 5" deep. The cover is held on with many slotted hex head screws, and the cover itself measures 17 1/2" by 19 1/2" and inside the box contains 5 terminal blocks which can be removed. One is missing but have no clue where I might have put it.

All of you know that parts just seem to run off and get lost all by themselves.....

It

is large enough to contain a repeater, or a substantial antenna farm relay and sequencing system. It is as large as my tower tuning coil/transmitting capacitor cabinet. No, I don't need another one.

The

terminal blocks are proud of the bottom on stand-off mounts. The box bolts to the structure with three welded on brackets that are 12" apart on the top and one centered on the bottom of box. The brackets have 1/2 inch holes drilled into them.

The cover mounting screws are threaded with 3/8-18 thread and are captive type so they will not fall out and get lost.

The box is steel and is painted Battleship gray.

The

cover contains a groove with a 1/2 inch wide gasket for water integrity and internal to the gasket, in the same slot is a rf shielding braided round material all the way around the cover's slot.

It is well made and looks like it would take a direct torpedo hit.

(well, I spent a lot of time on submarines!)

Raymond Cote
KD9CCZ

From knjhanlon at msn.com Wed Sep 30 18:40:00 2015
From: knjhanlon at msn.com (JAMES HANLON)
Date: Wed, 30 Sep 2015 16:40:00 -0600

Subject: [BoatAnchors] FW: KY5Q Acquired R-390A
In-Reply-To: <BAY403-EAS316AFF47EA0D6D988164CC6B94D0@phx.gbl>
References: <557463389-1443584517-
cardhu_decombobulator_blackberry.rim.net-1176666638-@b4.c2.bise6.blackberry>,
<BAY403-EAS316AFF47EA0D6D988164CC6B94D0@phx.gbl>
Message-ID: <BLU184-W743BA31DC4B8846C6AEA15A04D0@phx.gbl>

Bill,

I am forwarding your request below to the Boatanchors Reflector. There are a number of folks there who are experienced R390A mechanics and who should be able to offer you some well-informed advice. I understand you've been advised to start by replacing all of the capacitors. I suggest you hold off on that until you've heard from several knowledgeable R390a owners. My general experience in restoring more than 40 Communications receivers dating back as far as 1933 is that about 90% of the time I do not see evidence of wholesale, end-of-life behavior with all of the caps. There are some particular, well-known types of caps such as molded "black-beauties" and the molded caps found in BC348 receivers that should be replaced. But my general experience says just to replace the ones that are leaky or shorted and leave the others alone.

Jim Hanlon, W8KGI

From: Bill Ripley <bill.ripley at ces-noam.com> Date: Wed, 30 Sep 2015 03:18:28 +0000
To: jpanthes at comcast.net<jpanthes at comcast.net>; James Hanlon<knjhanlon at msn.com>
Subject: KY5Q Acquired R-390A I bought an R-390A last week, Seems to be in good condition and not badly abused. I have not fired it up yet, but the guy that I bought it from told me that he turned it on and listened to WWV in a few spots and all seemed to be OK. This is my first foray into restoring anything this good and wondered if you guys had any opinions. I'm thinking I should invest in some cleaners (like De-Oxit), but I'd love to have some advice as to which ones are good, and any pitfalls. After I get the thing running well (whatever that means), I've noticed a mod that looked pretty good from Treetop Circuits that added a SSB detector on a PCB that mounts on the back and installs very non-invasively. <http://www.treetopcircuits.com/docs/SB390Manual.pdf> Thoughts? Bill Ripley
Creative Electronic Systems - North America (505) 503-7491 (Office) (505) 980-8353 (Cell) Bill.Ripley at CES-NoAm.com

From: navy.radio at gmail.com Wed Sep 30 20:00:57 2015
From: navy.radio at gmail.com (Nick England)
Date: Wed, 30 Sep 2015 20:00:57 -0400
Subject: [BoatAnchors] FW: KY5Q Acquired R-390A
In-Reply-To: <BLU184-W743BA31DC4B8846C6AEA15A04D0@phx.gbl>
References: <557463389-1443584517-
cardhu_decombobulator_blackberry.rim.net-1176666638-@b4.c2.bise6.blackberry>
<BAY403-EAS316AFF47EA0D6D988164CC6B94D0@phx.gbl>
<BLU184-W743BA31DC4B8846C6AEA15A04D0@phx.gbl>

Message-ID: <CAB55hNf2buz_nyuiNFhHm9zR6W0R8=M0_Mz8wMntN2nBcB4CWg@mail.gmail.com>

Common advice is to At least replace C553 which keeps DC off the mechanical filters. If it gets leaky you can blow those filters. That definitely makes sense to me. I am not a shotgun recapper. YMMV.

Cheers,

Nick

On Wednesday, September 30, 2015, JAMES HANLON via BoatAnchors <boatanchors at theporch.com> wrote:

> Bill,

>

> I am forwarding your request below to the Boatanchors Reflector. There
> are a number of folks there who are experienced R390A mechanics and who
> should be able to offer you some well-informed advice. I understand you've
> been advised to start by replacing all of the capacitors. I suggest you
> hold off on that until you've heard from several knowledgeable R390a
> owners. My general experience in restoring more than 40 Communications
> receivers dating back as far as 1933 is that about 90% of the time I do not
> see evidence of wholesale, end-of-life behavior with all of the caps.
> There are some particular, well-known types of caps such as molded
> "black-beauties" and the molded caps found in BC348 receivers that should
> be replaced. But my general experience says just to replace the ones that
> are leaky or shorted and leave the others alone.

>

> Jim Hanlon, W8KGI

>

> From: Bill Ripley <bill.ripley at ces-noam.com <javascript:;>> Date: Wed,
> 30 Sep 2015 03:18:28 +0000To: jpanthes at comcast.net <javascript:;><
> jpanthes at comcast.net <javascript:;>>; James Hanlon<knjhanlon at msn.com
> <javascript:;>>Subject: KY5Q Acquired R-390A I bought an R-390A last
> week, Seems to be in good condition and not badly abused. I have not fired
> it up yet, but the guy that I bought it from told me that he turned it on
> and listened to WWV in a few spots and all seemed to be OK. This is my
> first foray into restoring anything this good and wondered if you guys had
> any opinions. I?m thinking I should invest in some cleaners (like
> De-Oxit), but I?d love to have some advice as to which ones are good, and
> any pitfalls. After I get the thing running well (whatever that means),
> I?ve noticed a mod that looked pretty good from Treetop Circuits that added
> a SSB detector on a PCB that mounts on the back and installs very
> non-invasively. <http://www.treetopcircuits.com/docs/SB390Manual.pdf>
> Thoughts? Bill RipleyCreative Electronic Systems - North America(505)
> 503-7491 (Office)(505) 980-8353 (Cell)Bill.Ripley at CES-NoAm.com

>

> -----
> BoatAnchors mailing list

> BoatAnchors at theporch.com <javascript:;>

> <https://minime.theporch.com/mailman/listinfo/boatanchors>

>

--

Nick England K4NYW
www.navy-radio.com

From 1oldlens1 at ix.netcom.com Wed Sep 30 20:10:26 2015
From: 1oldlens1 at ix.netcom.com (Richard Knoppow)
Date: Wed, 30 Sep 2015 17:10:26 -0700
Subject: [BoatAnchors] FW: KY5Q Acquired R-390A
In-Reply-To: <BLU184-W743BA31DC4B8846C6AEA15A04D0@phx.gbl>
References: <557463389-1443584517-cardhu_decombobulator_blackberry.rim.net-1176666638-@b4.c2.bise6.blackberry>
<BAY403-EAS316AFF47EA0D6D988164CC6B94D0@phx.gbl>
<BLU184-W743BA31DC4B8846C6AEA15A04D0@phx.gbl>
Message-ID: <560C79F2.4050309@ix.netcom.com>

I am not experienced with R-390s but have worked on 51J series. My R-388/51J-3 has mostly ceramic caps in it. In fact, I don't think it has any paper caps at all, they are ceramic or mica with the exception of the filter caps which are electrolytic. The dog-bone ceramics Collins used in this receiver seem to fail very rarely and certainly should not be shotgunned.

Paper caps are highly variable but most have some limit on life. The higher the rated voltage compared to the actual voltage on the cap seems an important determiner of life, the greater the ratio the longer the cap will last. I think this is one reason that its common to find 600 volt caps in circuits where they never see more than perhaps 100 volts DC. Not sure what, if any, effect AC alone has.

On 9/30/2015 3:40 PM, JAMES HANLON via BoatAnchors wrote:

> Bill,

>

> I am forwarding your request below to the Boatanchors Reflector. There are a number of folks there who are experienced R390A mechanics and who should be able to offer you some well-informed advice. I understand you've been advised to start by replacing all of the capacitors. I suggest you hold off on that until you've heard from several knowledgeable R390a owners. My general experience in restoring more than 40 Communications receivers dating back as far as 1933 is that about 90% of the time I do not see evidence of wholesale, end-of-life behavior with all of the caps. There are some particular, well-known types of caps such as molded "black-beauties" and the molded caps found in BC348 receivers that should be replaced. But my general experience says just to replace the ones that are leaky or shorted and leave the others alone.

>

> Jim Hanlon, W8KGI

>
> From: Bill Ripley <bill.ripley at ces-noam.com> Date: Wed, 30 Sep 2015
03:18:28 +0000To: jpanthes at comcast.net<jpanthes at comcast.net>; James
Hanlon<knjhanlon at msn.com>Subject: KY5Q Acquired R-390A I bought an R-390A last
week, Seems to be in good condition and not badly abused. I have not fired it up
yet, but the guy that I bought it from told me that he turned it on and listened
to WWV in a few spots and all seemed to be OK. This is my first foray into
restoring anything this good and wondered if you guys had any opinions. I'm
thinking I should invest in some cleaners (like De-Oxit), but I'd love to have
some advice as to which ones are good, and any pitfalls. After I get the thing
running well (whatever that means), I've noticed a mod that looked pretty good
from Treetop Circuits that added a SSB detector on a PCB that mounts on the back
and installs very non-invasively. [http://www.treetopcircuits.com/docs/
SB390Manual.pdf](http://www.treetopcircuits.com/docs/SB390Manual.pdf) Thoughts? Bill RipleyCreative Electronic Systems - North
America(505) 503-7491 (Office)(505) 980-8353 (Cell)Bill.Ripley at CES-NoAm.com

> -----
> BoatAnchors mailing list
> BoatAnchors at theporch.com
> <https://minime.theporch.com/mailman/listinfo/boatanchors>
>

--
Richard Knoppow
1oldlens1 at ix.netcom.com
WB6KBL

From spr at earthlink.net Wed Sep 30 20:11:58 2015
From: spr at earthlink.net (spr at earthlink.net)
Date: Wed, 30 Sep 2015 17:11:58 -0700 (GMT-07:00)
Subject: [BoatAnchors] FW: KY5Q Acquired R-390A
Message-ID: <29017669.1443658319356.JavaMail.root@wamui-
mosaic.atl.sa.earthlink.net>

I absolutely agree with replacing C553 in the IF deck.

I would also recommend replacing the input AC filter (or caps, if separate--my
radio is at home and I'm at work at the moment so don't remember which. This is
a safety thing, and can prevent blown antenna coil primaries--experience speaking
here, although it was a Scott 800B receiver, not a 390A. You really don't want the
AC line connected to the chassis by *surprise*!

/scott

-----Original Message-----

>From: Nick England via BoatAnchors <boatanchors at theporch.com>

>Sent: Sep 30, 2015 5:00 PM
>To: JAMES HANLON <knjhanlon at msn.com>
>Cc: boatanchors <boatanchors at minime.theporch.com>, "bill.ripley at ces-noam.com" <bill.ripley at ces-noam.com>
>Subject: Re: [BoatAnchors] FW: KY5Q Acquired R-390A
>
>Common advice is to At least replace C553 which keeps DC off the mechanical
>filters. If it gets leaky you can blow those filters. That definitely makes
>sense to me. I am not a shotgun recapper. YMMV.
>Cheers,
>Nick
>
>On Wednesday, September 30, 2015, JAMES HANLON via BoatAnchors <
>boatanchors at theporch.com> wrote:
>
>> Bill,
>>
>> I am forwarding your request below to the Boatanchors Reflector. There
>> are a number of folks there who are experienced R390A mechanics and who
>> should be able to offer you some well-informed advice. I understand you've
>> been advised to start by replacing all of the capacitors. I suggest you
>> hold off on that until you've heard from several knowledgeable R390a
>> owners. My general experience in restoring more than 40 Communications
>> receivers dating back as far as 1933 is that about 90% of the time I do not
>> see evidence of wholesale, end-of-life behavior with all of the caps.
>> There are some particular, well-known types of caps such as molded
>> "black-beauties" and the molded caps found in BC348 receivers that should
>> be replaced. But my general experience says just to replace the ones that
>> are leaky or shorted and leave the others alone.
>>
>> Jim Hanlon, W8KGI
>>
>> From: Bill Ripley <bill.ripley at ces-noam.com <javascript:;>> Date: Wed,
>> 30 Sep 2015 03:18:28 +0000To: jpanthes at comcast.net <javascript:;><
>> jpanthes at comcast.net <javascript:;>>; James Hanlon<knjhanlon at msn.com
>> <javascript:;>>Subject: KY5Q Acquired R-390A I bought an R-390A last
>> week, Seems to be in good condition and not badly abused. I have not fired
>> it up yet, but the guy that I bought it from told me that he turned it on
>> and listened to WWV in a few spots and all seemed to be OK. This is my
>> first foray into restoring anything this good and wondered if you guys had
>> any opinions. I'm thinking I should invest in some cleaners (like
>> De-Oxit), but I'd love to have some advice as to which ones are good, and
>> any pitfalls. After I get the thing running well (whatever that means),
>> I've noticed a mod that looked pretty good from Treetop Circuits that added
>> a SSB detector on a PCB that mounts on the back and installs very
>> non-invasively. <http://www.treetopcircuits.com/docs/SB390Manual.pdf>
>> Thoughts? Bill RipleyCreative Electronic Systems - North America(505)
>> 503-7491 (Office)(505) 980-8353 (Cell)Bill.Ripley at CES-NoAm.com

```
>> -----
>> BoatAnchors mailing list
>> BoatAnchors at theporch.com <javascript:;>
>> https://minime.theporch.com/mailman/listinfo/boatanchors
>>
>
>
>--
>Nick England K4NYW
>www.navy-radio.com
>-----
>BoatAnchors mailing list
>BoatAnchors at theporch.com
>https://minime.theporch.com/mailman/listinfo/boatanchors
```

From donreaves at gmail.com Wed Sep 30 23:40:35 2015
From: donreaves at gmail.com (Don Reaves)
Date: Wed, 30 Sep 2015 22:40:35 -0500
Subject: [BoatAnchors] FW: KY5Q Acquired R-390A
In-Reply-To: <29017669.1443658319356.JavaMail.root@wamui-mosaic.atl.sa.earthlink.net>
References: <29017669.1443658319356.JavaMail.root@wamui-mosaic.atl.sa.earthlink.net>
Message-ID: <CAEj02LYj0k2gZ2qQ3ojcVXPumc4NZJXhRhkU016ng_TxmAxwPA@mail.gmail.com>

Hi Bill,

This quick guide might help you. Some of the web resource links are probably off line by now.
<http://militaryradio.com/R390AMaintenanceTasks.pdf>

For in depth help I invite you to join the R-390A mailing list. Its a high SN ratio list (OK, I'm biased about -100 v), just like our famous boatanchor list. <http://mailman.qth.net/mailman/listinfo/r-390>

Don W5OR